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JANUARY [illegible]

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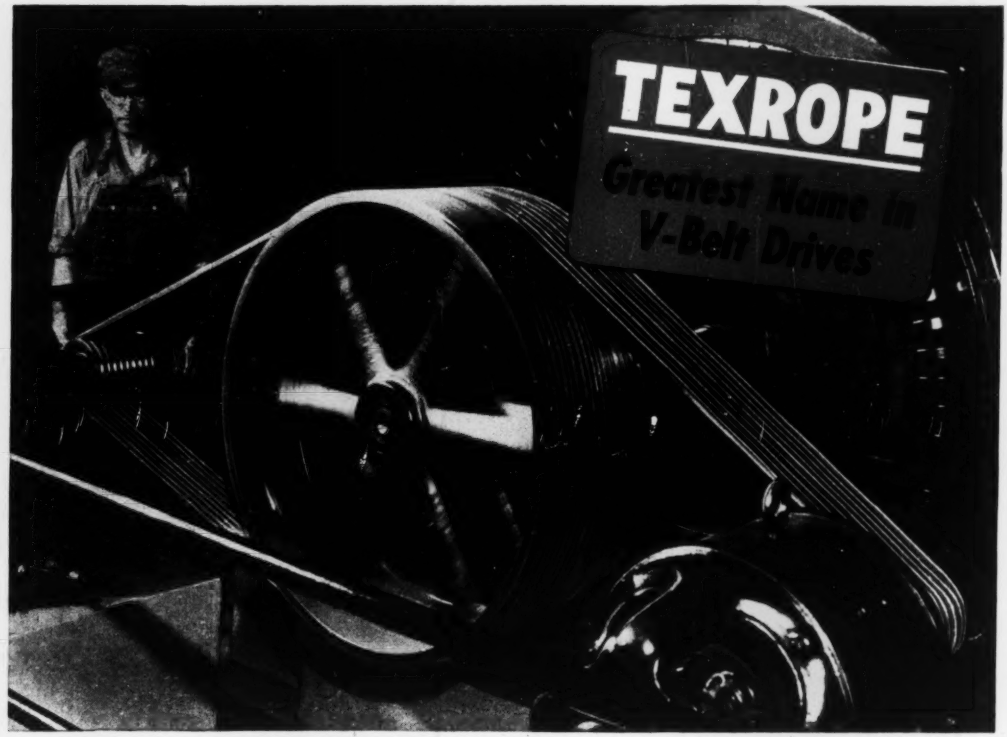

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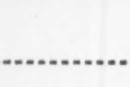

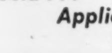

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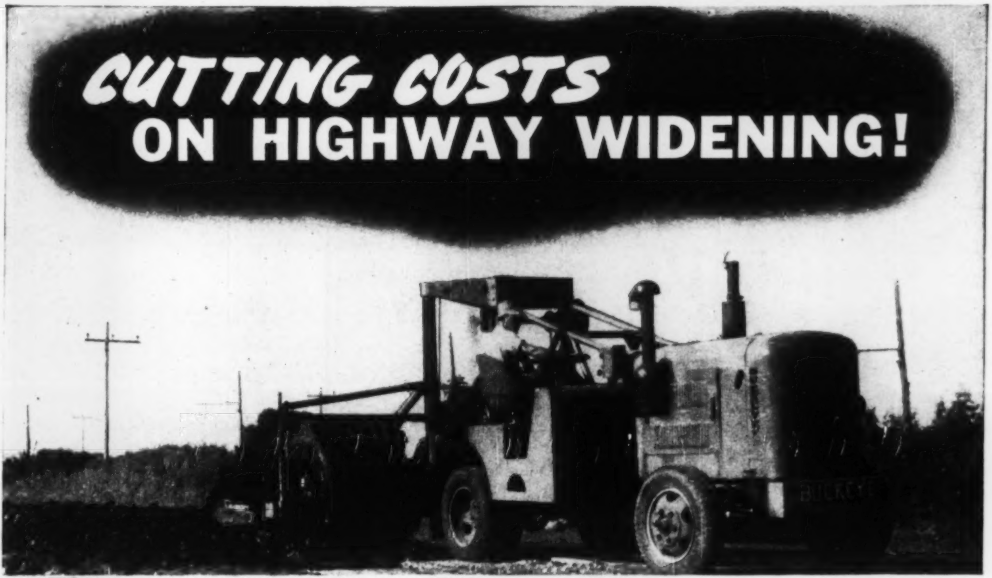

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ENGINEERING NEWS-RECORD

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THE COVER PICTURE

A civil engineer and educator who has somehow found more time than most of his fellows to indulge a warmly-human personality and an inquiring mind, Franklin Thomas has now added the presidency of the American Society of Civil Engineers to his long list of honors.

Native of Red Oak, Iowa, and a graduate of the Univesrity of Iowa and McGill University, Dean Thomas spent four years in the field before joining the California Institute of Technology (in 1913) to aid in developing that school's journalism courses. He is now professor of civil engineering and dean of students at Caltech.

A man of many interests, Dean Thomas during a long career has also been: Vice-chairman of the board of directors for the City of Pasadena; president of the Pasadena Civic Orchestra Association; a director of the Metropolitan Water District of Southern California since its organization in 1928; consultant on flood control and sanitation projects to Los Angeles; and a member and now chairman of the Colorado River Board of California.

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HORTON Radial-Cone Bottom Elevated Tanks
. . . for capacities of 500,000 gallons or more

Statesville's new tank holds 1,000,000 gallons, yet has a range in head of only 25 feet . . . . . .

1,000,000-gal. Horton radial-cone bottom elevated tank recently erected at Statesville, N. C. The city's water works improvements were designed by Peirson & Whitman, Consulting Engineers, of Raleigh, N. C.

THERE are two important considerations in designing large-capacity elevated tanks, (a) to eliminate excessive ranges in head—as a means of reducing the cost of power required to fill the tank, and (b) to design tanks which will be structurally sound. The Horton radial-cone bottom design does both. It is used effectively in the building of welded steel tanks with capacities from 500,000 to 2,000,000 gals., and results in structures which are efficient in operation, economically erected, graceful in design.

The 1,000,000-gal. radial-cone bottom tank at Statesville, N. C., was installed to provide better water service by supplementing pumping pressure with gravity water pressure. Accordingly, a location for the tank was specified at the opposite side of the city from the pumping plant, so that the gravity water pressure is greatest in the areas where pumping pressure is lowest. The city reports an average pressure of 70 lbs. per sq. in. in the mains, with "very small variation".

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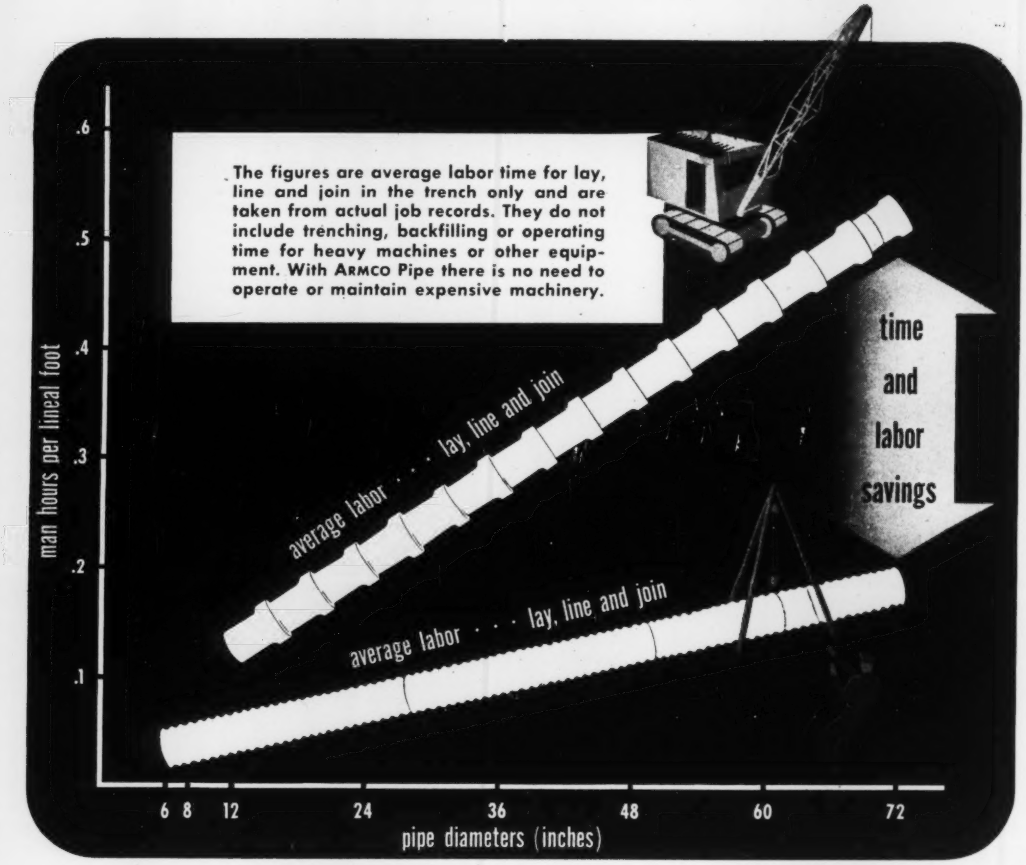
The figures are average labor time for lay, line and join in the trench only and are taken from actual job records. They do not include trenching, backfilling or operating time for heavy machines or other equipment. With ARMCO Pipe there is no need to operate or maintain expensive machinery.

"Sweeten" your bids with lower labor costs

As a contractor, why not give yourself a break and do that next drainage job with ARMCO Corrugated Pipe. Thousands of installations prove it is easier to handle and install—saves you time, labor and money. You pocket the difference.

Savings start the minute you begin to haul or handle ARMCO Pipe. Although amply strong it often weighs only one-tenth as much as more massive types. A few unskilled men quickly make the installation without special equipment. Trenches need only be wide enough for men to work since there are no bells or massive joints that require extra digging. Using simple band couplers, it takes only a surprisingly short time to join individual lengths—20 feet or longer—into a tight, sturdy conduit. Long, straight lengths make it easy to maintain line and grade. There is little or no foundation work because ARMCO Pipe has beam strength to span the soft spots. Breakage is no problem in handling or backfilling.

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THE CONSTRUCTION WEEK

SAN FRANCISCO BRIDGE—The proposed new bridge across San Francisco Bay faces a political hurdle. Opposing a new bridge paralleling the existing one, as recommended in the Tudor report, are the San Francisco city hall group including two local congressmen and the San Francisco newspapers. Contrary to news reports, most of the large business interests on both sides of the Bay agree with the report. Now that War Department approval has been given, the only federal sanction remaining to be obtained is congressional authority for certain rights of way. Ordinarily this would be a routine matter, but in this instance the politicians may elect to make it a focal point of their opposition.

TVA STEAM PLANT FIGHT CONTINUES—A large segment of the privately-owned electric utility industry has renewed its battle against TVA's proposed $4,000,000 steam plant at New Johnsonville, Tenn. The National Association of Electric Companies issued a booklet titled, "TVA's New Design for Power", which contained a frank appeal to other private industry groups to aid in fighting the project. "The steam plant would put the federal government . . . outright into a commercial business, opening the way for nationalization . . ." NAEC said. In his message to Congress last week, the President gave direct support to this statement by recommending federal construction of steel plants.

THAT TUNNEL RECORD—The tunnel record that Walsh Construction Co. established on Pacific Gas and Electric Co. hydro work near Oroville, Calif. (43 ft. in 24 hr. for a 25-ft. horseshoe tunnel through hard granite formation) didn't last long. Morrison-Knudsen, contractor on the other end of the same tunnel, now has posted a 47-ft. advance. M-K also has the best six-day record, 206 ft. Adding to the competition between crews is the fact that superintendent for M-K is Alec Huntington, nephew of Les Huntington who is superintendent for Walsh.

ANOTHER RECORD—From a quite different direction comes news regarding another record. In commenting on a recent article about Cleveland's Nottingham Intake (ENR Nov. 25, p. 52) in which casting five sections of 24-ft. pipe in an eight-hour shift was considered excellent progress, J. S. Longwell, chief engineer and general manager for the East Bay Municipal Utility District in California, pointed out that better records were made on the District's Mokelumne Aqueduct. For this big operation, United Concrete Pipe Corp. maintained a regular schedule for weeks of casting 27 sections of 24-ft. pipe in a 12-hr. period. The Cleveland pipe sections weigh 50 tons as compared with 22 tons for the California pipe. On a comparable basis, 250 tons of pipe was produced in 8 hours at Cleveland compared with 396 tons in a similar period in California.

HAPPY OMEN—For the first time in years, Public Works Commissioner Oscar Hewitt of Chicago sees a chance to operate his water pumping plants at lower costs. The occasion was an analysis of bids received for supply of coal: a strip mine not far from the city has mechanized its operations to the point where it can offer coal at a price of $1.01 per ton cheaper than the next lowest bidder. Commissioner Hewitt says this will save the city $200,000 during the coming year.

RISING ST. LAWRENCE COSTS—Backers of the St. Lawrence seaway and power project in Washington are reported to be dismayed over the Army Engineers' latest estimate of the cost—$1.2 billion, an increase of $400 million over earlier estimates. Considering the cost of deepening Great Lakes channels and harbors, most of which will have to be financed by the federal government, the seaway costs rise to staggering figures.

UNIFIED STATE CONSTRUCTION?—Creation of a general state authority to handle all construction of Pennsylvania public buildings seems certain during the 1949 legislative session. Both Republican and Democratic members of the legislature have declared themselves in favor of such an agency, which would enable the commonwealth to continue its heavy construction program on a long-range amortization basis without the need of imposing new taxes.

HIGHWAY CONSULTANTS—More state highway departments are turning to consulting engineers for help in preparing road plans and specifications. Kentucky, for one, is negotiating with 12 private engineering concerns to prepare plans for its 1949 road building program. In adopting this course, Commissioner Withers declared that Kentucky's present salary limitations plus the lack of a retirement plan makes it impossible to secure and hold sufficient engineers.

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●The AMERICAN Revolver is the giant that does a giant's work in the construction world. It's especially designed for such heavy material handling jobs as pouring concrete at high speeds, excavating for piers and foundations, rip rap work and dam construction. Gigantic in every sense, the AMERICAN Revolver responds easily and accurately to its graduated air controls. Finger tip pressure is all that's needed to lift the load, or to swing or travel the crane.

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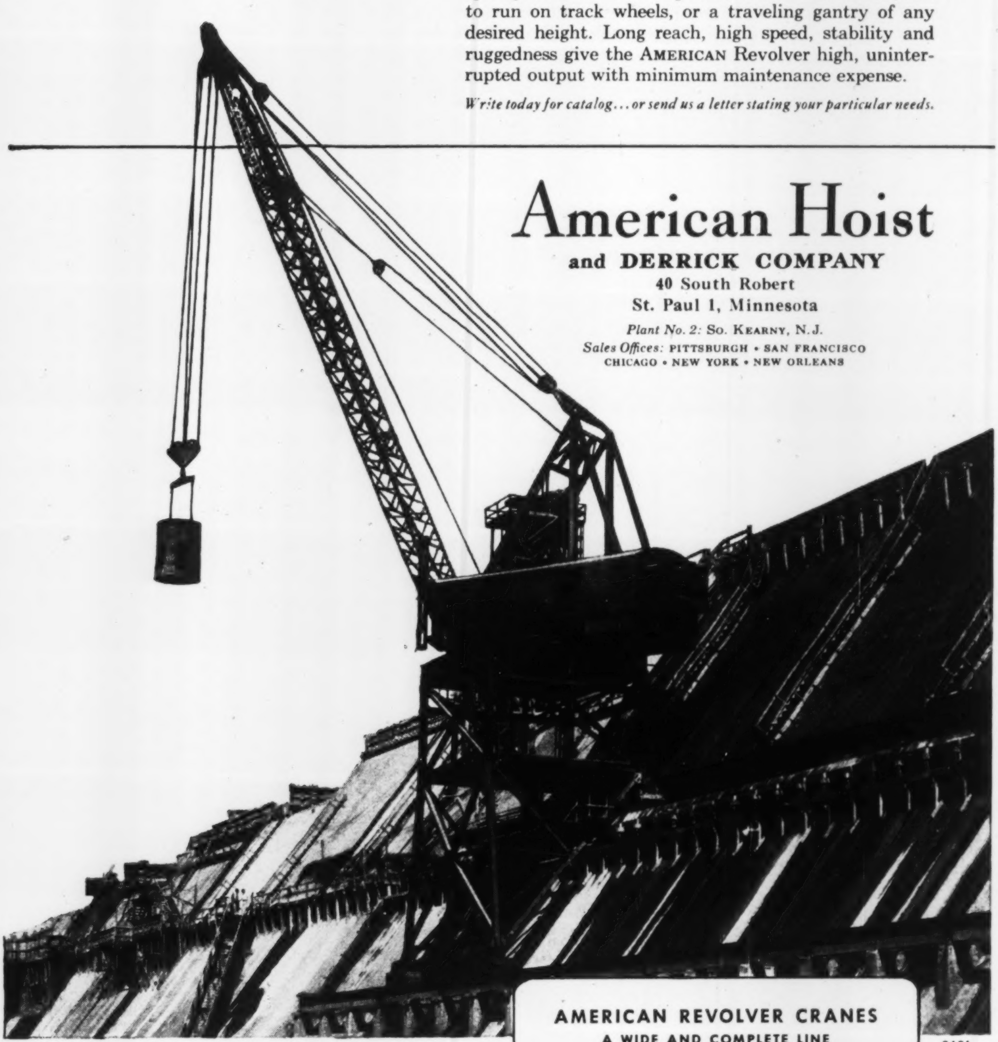

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EDITORIALS

From: The President. To: The Congress

PRESIDENT TRUMAN'S MESSAGE to Congress on the State of the Union was a second edition of his collected campaign promises. Except for the tongue-in-cheek proposal for federal construction of steel mills no discernable deletions, additions or changes were made. It, therefore, contained no surprises. Therefore, also, it will please a little more than half the voters in the country and be critically regarded by a little less than half, judging from the popular vote totals of the recent election. Those who disapprove, however, (if their objections focus on the President's social-gains proposals) will not find much solace in wishing the election result had been different. At the same time that President Truman was speaking, Governor Dewey was urging such things on the New York legislature as more public housing, more public power, increased aids to education, greater expenditures for hospitals, sustained rent control, and public transmission lines for power. As has been noted here before, an increase in public works construction in 1949 was inevitable. We have in the President's message further confirmation of the fact. He urges pushing forward on power, irrigation, navigation and flood control; aiding states to replace overcrowded, obsolete school buildings; passing a public housing law that will provide for a million housing units in seven years. These are worthy objectives. Some of them would benefit if a greater participation of private enterprise were likely to be enlisted. All will assume practicality in the proportion to which their attainment is geared to our financial resources. And in this connection, some necessary objectives—better highways, for example—failed to receive mention, although a road program about equal to last year's was recommended in his later budget message. What is actually undertaken in the field of public works, Congress in its wisdom will have to decide.

A Test of Leadership

EVIDENCE that the National Society of Professional Engineers is beginning to take its place in the engineering profession is found in the report of its annual meeting held in Chicago recently (ENR Dec. 30, p. 8). Particularly encouraging is its decision to make a thorough study of fees for professional services. NSPE progress has been slow and frequently discouraging during the 14 years since it was organized by representatives from four state societies of professional engineers. For much of this time it was national only in name, it lacked widespread acceptance even among engineers in the states it was supposed to represent, and chiefly it lacked objectives that would enlist active interest and support. Also, there appeared to be reluctance to tackle difficult problems, such as those that arose out of efforts to unionize engineering employees. Fees represent another one of these difficult problems. A study of them is badly needed for reasons set forth in detail in our issue of Oct. 14, p. 83, and it will not be easy because it will be considered by some as an encroachment on the field of activities of the older engineering societies. How well the study is handled, therefore, will be good evidence of the stature attained by the NSPE.

Wintertime Road Lettings

THE LARGE NUMBERS of bridge and highway construction contracts awarded by some of the states during the last quarter of 1948 is an encouraging sign that this year's programs will get off to a good start when weather opens up in the spring. Much can be said in favor of the wintertime letting of construction contracts, particularly in these times of uncertain delivery dates for construction materials. It gives the contractor an opportunity either to accumulate stockpiles or to secure confirmed dates for their delivery. Equally important, is the opportunity to plan the job better, secure proper supervising personnel and adequate construction equipment. All these add up to the fact that, given a break in the weather, the work gets started sooner and the completed facility is ready for use by the traveling public at an earlier date. Highway departments with the foresight to recognize the advantages of wintertime contract lettings will also secure better competitive bids, which is a further public service.

Longer Lives, Fewer Deaths

THAT PERSISTENT APPLICATION of sanitary practices produces results is proven by Puerto Rico where the life span has increased nineteen years since 1910 and where the death rate has fallen from 27 to 12 per 1,000 inhabitants in the past 50 years. Deaths from malaria alone—the worst scourge of the island—are down to 20 per 100,000 population. The results are attributable to the concentrated, unceasing efforts of federal, insular and private agencies as well as The Rockefeller Foundation. The many-phased program continues to deal death to malaria-transmitting mosquitoes, provide safe water supplies and proper sewage disposal, and encourage healthful housing and adequate hospital facilities. The lesson is this: The chains of disease that bind economically fecund tropical areas can be stripped off if a reasonable prior investment is made in sanitary protection.

SPEED CONSTRUCTION

LOWER COSTS with....

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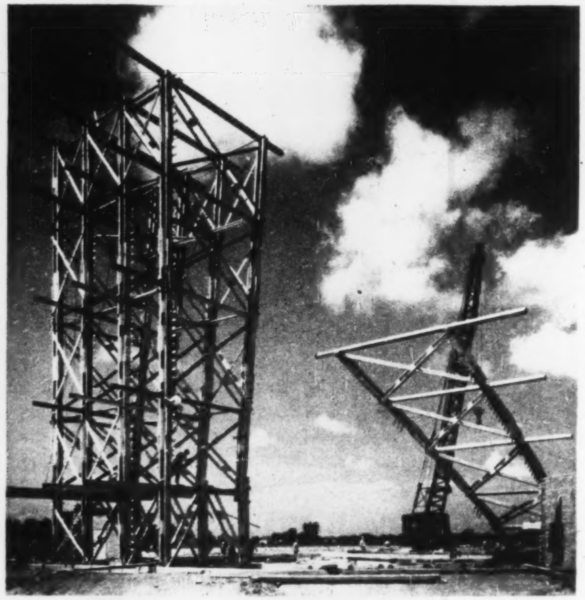

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ENGINEERING NEWS-RECORD

JANUARY 13, 1949 VOL. 142 NO. 2

Truman Budgets $2.2 Billion For U. S. Construction Work

Recommendations for 1950 fiscal year call for greatest dollar volume on record—construction appropriations are 5 percent of $41.9 billion total budget

Despite apparently drastic cutbacks, President Truman last week asked Congress for more than $2.2 billion to cover construction activities of the U. S. government.

Out of a grand total of nearly $41.9 billion to cover all governmental expenditures for the coming fiscal year, the President told Congress that civil works should be given the largest amount of money ever called for by a U. S. Chief Executive.

In a message replete with examples of attempts to hold construction to a minimum level, Mr. Truman reported that the Veterans Administration's authorized $1.2 billion hospital program had been cut back by $279 million since the full number of beds originally planned will not be needed. He explained that money already made available to VA would, however, finance estimated expenditures of $260 million for hospital construction during fiscal 1950. This example, incidentally, serves as an illustration of how the government can finance construction far in excess of appropriations for the fiscal year. Thus, actual expenditures, as contrasted to appropriations, are expected to run to $3 billion or more for civil works, and $300 million for military construction.

But, besides cash carryovers from previous years—as in the case of VA—other federal construction money requiring no Congressional appropriations would come from such places as the Rural Electrification Administration, which expects to pay out $360 million in loans; the Reconstruction Finance Corp., which estimates $35,000,000 in loan payments; and the Tennessee Valley Authority, which plans to finance part of its work with $21,500,000 of own corporate funds.

Emphasizes cutbacks

Commenting on his huge program, the President said:

"(Resources development) programs are being restricted to the lowest possible level, consistent with the heavy demands . . . for both civilian and national defense requirements. . . . More than 90 percent of the recommended expenditure for river basin developments . . . is to continue work started in prior years, and despite this restriction . . . outlays will be about $1 billion. . . .

"The flood control program for the Corps of Engineers will be limited . . . almost entirely to continuation of work started in prior years . . . only two new projects are recommended. . . . Only twelve new projects of highest urgency are recommended for river and harbor improvements."

Of the highway program, the President added: "Federal grants-in-aid for road construction will be close to the level authorized in existing legislation. Even with this high level of federal aid, our highways are not being improved as fast as they wear out. . . . Nevertheless, present high costs and the limited capacity of the construction industry make it undesirable for expenditures in the fiscal year 1950 to exceed the estimated level of $501 million."

CONSTRUCTION BUDGET

Principal Estimated Construction Expenditures For Fiscal 1950

	($ million)
VA Hospitals	260
PHS Federal-Aid Hospitals	60
RFC Loans	35
REA	360
USBR	322
Corps of Engrs:	
Flood Control	481
Rivers & Harbors	217
AEC	326
PRA	501
CAA Federal-Aid Airports	51
TVA	69

Civil works up

By comparison with recent years, the civil works appropriations recommended for fiscal 1950 exceed 1949 by $300 million, and 1948 by $1.1 billion.

Greatest expenditures included in the estimated total would go to the Corps of Engineers, which would get a total of $697 million for flood control and rivers and harbors work; the Atomic Energy Commission, $326 million; Bureau of Reclamation, $322 million; and Public Roads Administration (including Departments of Agriculture and Interior road work) $501 million.

Explaining the cutback on VA work, the Chief Executive said that review of the program revealed that "construction of the full number of 90 authorized hospitals will result in serious overbuilding—in terms of beds needed to meet foreseeable requirements," and he approved cancellation of 24 projects and reduction of capacity of 14 others, to curtail the original 53,000-bed program by about 16,000 beds.

TVA's much-argued thermal power plant, defeated at the last session of Congress, is again included in the recommendations—and a start on four other power projects, one of them steam, is proposed. The President asked for $3,000,000 for the TVA project.

Three new projects involving hydro power are set up in the message—including the $492 million St. Lawrence waterway and power development; and the President asked appropriations to start the $205 million Chief Joseph (formerly Foster Creek) Dam on the Columbia River; and the $86,000,000 Ice Harbor Lock and Dam on the Snake River.

The two new projects for the Army Engineers' flood control program are to be the $58,000,000 central and southern Florida project; and a $635,000 job at Rosiclare, Ill.

*(Detailed reports on appropriations asked for specific projects will appear in the January 20 issue of this journal.)

Under the Water Pollution Control Act of 1948, an appropriation of

(*Continued on p. 11*)

NEWS BRIEFS

Highways–State Senator R. A. Winter is introducing a bill in the Ohio legislature for a Turnpike Commission . . . In N. Y. State in 1948 there were 156 contracts for construction or reconstruction of 566 miles of highways for $85,073,000 . . . Wyoming plans to spend $21,848,000 for roads in two years . . . In Illinois highway construction of $42,500,000 was completed in 1948 . . . In South Dakota the legislative interim highway committee has proposed a 10-year construction program to cost $140-million . . . The present list of road projects in Oklahoma calls for $14,000,000, a big shrinkage as compared with last year . . . Louisiana expects to spend $43,000,000 in 1949 on its road improvement program . . . Pennsylvania Motor Federation says that increased revenue for the highway department may be necessary but that any boost of taxes on motorists should be only temporary.

Airports–A new airport was built by the Boosters Club at Michigan City, Ind., with 500 volunteer workers and 100 machines in 60 hours . . . C. F. Lytle Co. and Green Construction Co. of Des Moines, Iowa, have been recommended for the award of a contract for an international airport at Anchorage, Alaska on a low bid of $8,679,142 . . . Shreveport, La., has approved the construction of a Class 5 airport on the southwestern edge of the city.

Water Supply and Sewers–Tampa, Fla., a $13,000,000 issue of revenue bonds has been proposed to finance a master sewer improvement project . . . A compact dividing waters of the Pecos River between New Mexico and Texas was signed Dec. 3 by the Pecos Compact Commission at Santa Fe, N. M. It must now be approved by the legislatures of the two states and by Congress. The compact ends a 24-year dispute between the two states over division of the water . . . Philadelphia, Pa., has let contracts of $700,000 for cleaning and relining mains with concrete.

Dams–A large number of prominent contractors were present at the recent opening of bids on work for Fort Randall Dam, South Dakota. The Army Engineers estimate for the intake, tunnels and stilling basin works was $27,515,217. Bids are to be reviewed thoroughly before all announcements are made, but McCarthy Improvement Co., Davenport, Ia., was low at $10,977,836 for the regulating gate and terminal structures, powerhouse substructure, tailrace floor slab and stilling basin; and Silas Mason Co., Shreveport, La., with a bid of $8,585,808 won the contract for the 900-ft. 28-ft. dia. tunnels . . . A $7,614,728 contract for building the Soap Lake siphon of the Columbia Basin project was awarded Dec. 21 by the Bureau of Reclamation to the Utah Construction Co. and Winston Brothers Co. . . . U. S. Army engineers will recommend a series of flood control levees along the Mississippi River near Cape Girardeau, Mo., to cost about $3,897,000. The plan goes to the Board of Engineers for Rivers and Harbors at Washington for consideration and further recommendation.

Theodore J. Kauer chosen director of Ohio highways

Theodore J. Kauer, for more than three years managing director of the Wire Reinforcement Institute, returned to his home state of Ohio on Jan. 10 to serve as director of highways with headquarters in Columbus.

A graduate civil engineer of Ohio State University in 1928, Mr. Kauer was employed by the Ohio Department of Highways from 1927 to 1940.

Mr. Kauer resigned from the Ohio department to serve with the Civil Aeronautics Administration in Washington, D. C., as an airport paving engineer. He left CAA in 1941 to become assistant managing director of the American Concrete Pipe Association, remaining there until 1945.

E. J. Cleary leaves ENR for Ohio Valley post

The newly created position of executive director and chief engineer of the Ohio River Valley Water Sanitation Commission will be filled by Edward J. Cleary who has resigned as executive editor of Engineering News-Record effective Feb. 1. From headquarters in Cincinnati, Cleary will direct the work on stream pollution abatement envisaged in the compact signed a year ago (ENR March 18, 1948, p. 77) by the governors of the eight states in which the Ohio River and its tributaries flow.

Ed Cleary joined the editorial staff of Engineering News-Record in 1935 as its sanitary specialist. A 1929 graduate of Rutgers University, where he had earned three degrees in engineering, he had later served as research assistant to Dr. Willem Rudolfs, chief of the New Jersey Water and Sewage Investigation Station. His editorial work with Engineering News-Record has added to his broad background of sanitary engineering experience. Prior to his work in sanitation he had also worked as a field engineer on the construction of the Raritan River, N. J., plant of the Utilities Power and Light Corp. and on the Christiana River compressed air tunnel for the Wilmington, Del., water supply system.

Active in all municipal matters as well as in sanitation, he served for four years as a part-time lecturer on the faculty of the College of Engineering of New York University where he conducted a course on public works organization. He is currently serving as vice-president of the American Public Works Association.

In 1943, Cleary was accredited as a war correspondent to report for Engineering News-Record on the work of the United States military engineers and civilian contractors in building airbases, railroads, ports and sanitation facilities in strategic areas in South America. At the same time he became a consultant to the health and sanitation division of the Institute of Inter-American Affairs, a federal government agency engaged in promoting sanitary improvements in Latin American countries.

Cleary is co-author of the book "Bulldozers Come First", an account of war construction activities throughout the world, which was compiled from on-the-scene reports by the editors of Engineering News-Record. He is a member of the American Society of Civil Engineers, the American Water Works Association, Federation of Sewage Works Associations, and the Inter-American Association of Sanitary Engineering. He is a Sigma Xi and Tau Beta Pi.

President proposes record U. S. budget

(*Continued from p. 9*)

$1,000,000 is recommended for the Public Health Service, for use in grants to the states for industrial water research. An additional $500,000 is proposed for use of the Federal Works Agency for grants to the states and communities for planning pollution control facilities.

The message calls for no appropriations for the public buildings program—the Public Buildings Administration will expend $50,000,000 on construction of buildings for various government needs, however, including a new census building, reconstruction of the White House, and a Senate office building.

Of the military construction appropriations, $134 million would go for Army work; $53,000,000 for the Navy, and $16,000,000 for the Air Force.

Additionally, the budget recommends appropriation of $21,400,000 for topographic mapping and geodetic control surveys, and for assembling hydrologic data. The sum of $12,600,000 is recommended for continuing preliminary surveys on construction projects that are under investigation; and $18,000,000 would be set up for planning of authorized projects, principally by the Corps of Engineers and the Bureau of Reclamation.

Reviews situation

In his State of the Union and Economic messages, presented a few days earlier than the budget message, Mr. Truman had spelled out for Congress again the basic principles of a dozen recommendations he has long advocated. Two of his declarations, however, went beyond previous statements:

One proposed a new policy. Speaking of steel and other short commodities, he asked for a prompt study of production capacity, and authority for direct construction of additional plant that may be found necessary.

A second expanded earlier endorsement of the Taft-Ellender-Wagner housing bill, declared that the new Congress should increase the number of low-rent public housing units to 1,000,000 in the next seven years. TEW called for 500,000 units in five years.

Economic thinking to back up the President's requests was contained in his economic report, when the Council of Economic Advisers, commenting on housing, said that "perhaps one-fifth of more of new dwelling units needed in urban areas can be provided only through subsidized low-rent housing." The council advised a substantial increase over the TEW provision of 100,000 units a year.

Looking to what they termed the salutary effect of the President's requested standby controls for materials, the council said that authorization of selected allocations and price controls need not rest on the conviction that they would be used. Instead the standby authority could be used as a weapon—if necessary—against inflation and to carry out public programs.

To take care of an estimated increase of three percent annually in total production of the country, the economic council saw a need for investment for each year of $2.5 to $3 billion to add 6,000,000 kw to electric generating capacity. Capital requirements of railroads, they predicted, they would amount to $1.3 to $1.4 billion per year—at 1947 prices.

For highways, they estimated an annual requirement of $4 billion for construction, maintenance and repair—about one third to city streets and expressways, one third to rural roads, one third to secondary and local roads.

"In the immediate future," the economists declared, "restraint in commercial building is needed in order to channel materials into housing." Over a longer range they foresaw commercial and private construction amounting to $2 billion or more per year.

Program has good chance

Immediate examples of cohesive action by House Democrats at the start of the new session have promise to observers that the President's legislation program would go through with some dispatch.

To break the House Rules Committee bottleneck that had blocked the TEW bill in the last Congress, a pre-session Democratic caucus voted to change the rules, and managed to ram the proposed changes (which make the committee more responsive to the House majority) through the whole chamber. A similar procedure, observers said, could be used to push through other controversial measures.

In the upper chamber, in direct response to the President's messages, Senator Ellender of Louisiana and five other Democrats introduced a bill to make possible the construction of 1,050,000 low rent units in seven years, starting July 1, at the rate of 150,000 a year. Republicans criticized the measure, incidentally, as taking too big a slice out of the total housing potential.

Dewey seeks $900 million N.Y. budget

Appearing before the opening session of the New York State legislature to ask approval of a record $900 million budget, Governor Thomas E. Dewey last week called for more intensive work on the state's deferred highway and housing programs.

Largest in the state's history, the budget is below New York City's $1 billion budget, adopted recently.

Calling for increased highway work, Gov. Dewey recalled that the state has deliberately held its highway construction to essential work during the last two years to avoid competition with housing and other essential construction in the matter of materials and labor.

"During recent months," the governor said, "conditions have changed. Contractors are at last seeking highway work, and a reasonable degree of competition has returned in bidding for awards."

He pointed out that highway traffic generally has increased by 23 percent during the last two years; while heavy truck traffic on major routes has gone up 41 percent.

Commenting that New York State has done more to meet its housing problem than any other, he took occasion to score "the failure of building codes to keep pace with technical advances", and proposed authorization for a commission to prepare a statewide minimum building code to cover all types of building.

On housing, he said:

"When I took office in 1943, the total fund authorized for housing was $300 million. In 1947, upon my recommendation, the public housing fund was increased to $435 million. The commissioner of housing now advises me that he has given approval to projects that will largely exhaust this fund.

"I therefore propose that our public housing fund be enlarged by an additional $300 million. . . . This will require the amount of subsidies, which the state may agree to pay annually to help reduce the rents in these projects, must also be increased."

The governor also called for renewed effort to proceed with the state development of the St. Lawrence River for power purposes; proposing that present laws under which the state power authority acts be relaxed to permit the authority to build transmission lines "where necessary."

ASCE prepares for 96th annual meet; lists awards of honors, new officers

Franklin Thomas formally elected as new president as program is completed for New York meeting—Five honorary members named

Franklin Thomas, professor of civil engineering and dean of students at California Institute of Technology, Pasadena, this week was formally declared elected president of the American Society of Civil Engineers, as the organization prepared for its 96th annual meeting in New York City, Jan. 19-21.

At the same time, an official canvass of votes certified the election of two new vice-presidents and six new directors.

All of the new officers will be seated as the three-day meeting gets under way at the Hotel Commodore in midtown New York City.

Honorary members

A highlight of the first day's session will be the conferring of honorary memberships—highest award in the gift of the society—on five outstanding engineers, for their accomplishments. The five are:

General Lucius D. Clay, commander-in-chief of U. S. forces in Europe, and Military Governor of the U. S. Zone in Germany; Charles H. Buford of Chicago, president of the Chicago, Milwaukee, St. Paul and Pacific Railroad; Prof. Donald Derickson of New Orleans, formerly head of the Tulane University school of civil engineering; Gano Dunn, president of the J. G. White Engineering Corp., New York City; and Andrew Weiss of Mexico City, D.F., consulting engineer for the Mexican Commission of Irrigation.

New officers, in addition to Dean Thomas, are:

Vice-presidents—Henry J. Sherman, consulting engineer of Camden, N. J., and Robert B. Brooks, consulting engineer, of St. Louis, Mo. Directors—Waldo G. Bowman, editor of ENGINEERING NEWS-RECORD, New York City; Morris Goodkind, bridge engineer for the New Jersey State Highway Department, New Brunswick, N. J.; Harold L. Blakeslee, treasurer, C. W. Blakeslee and Sons, Inc., New Haven, Conn.; Paul L. Holland, director of public works for Baltimore, Md.; Edmund Friedman, Miami, Fla., consulting engineer, and Professor Sidney T. Harding, of the University of California at Berkeley.

Medals and awards

Opening day ceremonies will also include the award of twelve medals and prizes for work done during the last year. These will be:

The Norman Medal, to Alfred M. Freudenthal, New York consulting engineer; the J. James R. Croes Medal, to Karl deVries, Bethlehem Steel Co.; the Thomas Fitch Rowland Prize, to M. M. Fitzhugh, Newport News, Va., James S. Miller, Pittsburgh and Prof. Karl Terzaghi, Harvard University.

Also, the James Laurie Prize, to Hyde Forbes, Palo Alto, Calif.; the Arthur M. Wellington Prize, to Joseph Barnett, Washington, D. C.; the Collingwood Prize for Juniors, to Prof. John K. Vennard, Stanford University; the Rudolf Hering Medal, to Prof. Charles E. Jacob, University of Utah; the J. C. Stevens Award, to Preston T. Bennett, Omaha; the Leon S. Moisseiff Award, to Prof. George Winter, Cornell University; and the Construction Engineering Prize, to C. Glenn Cappel, New Orleans, La.

Additionally, two members will receive national engineering awards: the Hoover Medal will be presented to Malcolm Pirnie, New York consulting engineer; and the John Fritz Medal will go to Prof. Charles Metcalf Allen, of Worcester Polytechnic Institute.

Representatives of the society's 70 local sections will attend the meeting, which will include 17 sessions.

QUONSET-HOUSED ATOM LAB—Atomic Energy Commission's Argonne National Laboratory covers eight acres near Chicago with its 33 buildings. To be devoted primarily to peacetime atomic energy uses, the lab will be available to 30 midwestern colleges, universities and research institutes. (Wide World Photo)

◆

Professional group asks for Niagara River power

The Technical Societies Council of the Niagara Frontier recently called for government action to expedite development of more power on the Niagara River.

The council with a membership of more than 8,000 engineers and technical men, says that plans have been on file for years for power development which, if carried out, would have averted the power shortage at this time. These plans would increase power-producing facilities of the Niagara Frontier without involving any further diversion from the Niagara River, according to a council statement.

Existing power plants are so laid out that only part of the available head is utilized, says the council's statement. The statement further claims that it is practicable to build plants having turbines using water at 310 ft. head which is now used at only 135 ft. Further, "Last year, with the presently authorized enlarged emergency diversion, such an overall plan would have increased power output from hydro plants in this area by about 2.3 billion kilowatt hours, or 64 percent over that produced by the existing plants."

◆

U. S. agrees to diversion through Welland Canal

Approval has been given a Canadian request to divert water from the Niagara River through the Welland Canal, for power purposes during the non-navigation season (ENR Dec. 9, p. 67).

Under-Secretary of State Robert Lovett confirmed the approval in a note to Canadian Ambassador Hume Wrong for diversion of 2,500 cfs. for use in the De Cew Falls power plant near St. Catherines, Ont.

Ruling spurs quest for closed shop law

AFL and CIO leaders look to political action in Congress and state legislatures for relief from last week's Supreme Court decision upholding the right of states to ban the closed shop.

The major attack—and the one most likely to succeed this year—will be on Congress to drop the closed shop ban when it passes a substitute for the Taft-Hartley Law. But returning to the permissive rule of the Wagner Act will not satisfy the labor leaders. This is because under the Wagner Act rule, as under the Taft-Hartley successor, state laws which ban the closed shop would take precedence over the federal law as to both intrastate and interstate businesses, according to Washington lawyers familiar with both labor laws.

The effect, then, would be to outlaw the closed shop for all businesses in the 12 states having such laws, as well as regulating it in four other states.

Much will depend, therefore, on how the 81st Congress phrases the provision of the new law which will restore the closed shop. Labor's legislative agents will urge that the new federal law specify that it takes precedence over state laws on this issue.

In 44 state capitals where legislatures meet this year, organized labor will try to kill state closed shop restrictions where they exist and resist enactment of such laws in the four remaining states.

States which ban the closed shop (as well as union shop and any other union membership requirement as a condition of work) are: Arizona, Arkansas, Florida, Georgia, Iowa, Nebraska, North Carolina, North Dakota, South Dakota, Tennessee, Texas and Virginia.

Four states permit the closed shop if it is approved by the employees. Kansas requires a majority vote, Wisconsin and New Hampshire a two-thirds majority, and Colorado a three-fourths majority.

Voters in Massachusetts, New Mexico and Maine voted down closed shop proposals in their states last year.

State bans upheld

The Supreme Court's recent action upheld "right to work" constitutional amendments in Arizona and Nebraska and a statute in North Carolina. The Court, affirming similar findings of state courts, was unanimous except for Justice Murphy's dissent in the Arizona case.

In holding against the AFL unions which brought these cases, the court relied on New Deal decisions which upheld the right of states to prohibit discrimination against union members and which permitted states to fix prices, wages and hours.

The Court's decision, written by Justice Black, chided the unions for claiming that the constitution protects union members against discrimination but does not provide the same protection for non-union members.

It is said the states have a right to legislate against injurious practices in their internal business affairs, "so long as their laws do not run afoul of some specific federal constitutional prohibition or of some valid federal law."

None of the cases involved a strike. If states made illegal the concerted refusal of union members to work with non-union members, Justice Rutledge stated he would want to hear reargument of the cases before making a decision.

Justice Murphy dissented in the Arizona Case because the Arizona amendment prohibits employment discrimination against non-union members, but is silent as to union members. The Court majority pointed out that union members are protected by an Arizona law against "yellow dog" contracts.

Cases cited

In the North Carolina case, an Asheville contractor, George Whitaker, and six AFL men were fined $50 for signing a contract limiting employment to union members.

In the Nebraska case, an employee of the Northwestern Iron & Metal Co. at Lincoln, Neb., refused to pay union dues and lost his AFL union membership. The company refused the union's demand that he be fired in accordance with the terms of a closed shop contract. The union sued the company in this case.

In the Arizona case, the AFL unions sought injunctions against American Sash & Door Co. and other employers seeking to require them to carry out their closed shop contracts despite the state's constitutional ban.

PERSPECTIVE . . .

German scrap begins to roll

At long last, commercial shipments of iron and steel scrap from Germany are beginning to arrive at U. S. ports.

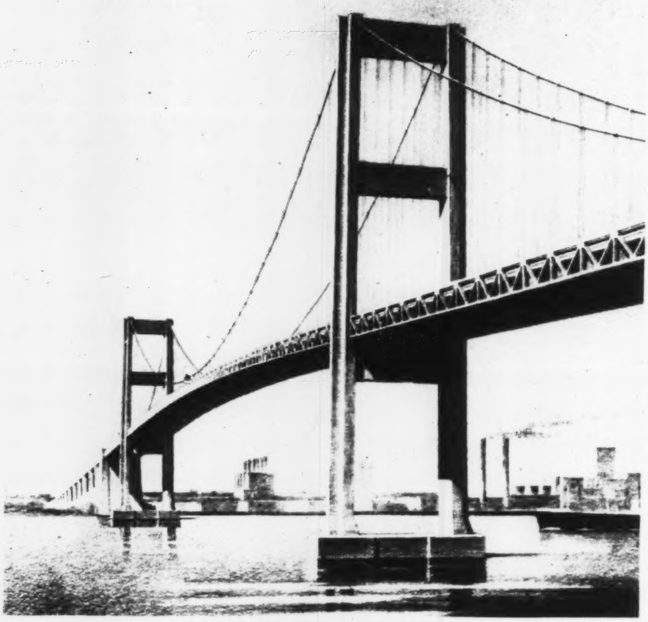
Government officials and the scrap trade look for continued improvement in the monthly rate with shipments expected to go as high as 100,000 tons in January and perhaps 150,000 tons a few months after that. If the expected improvement doesn't come through according to schedule, the administration will not hesitate to ask the new Congress for legislation to create a centralized agency to buy and sell German scrap.

Commerce has already made one try for this centralized agency—and failed. It began pushing the idea last summer under the Taft Voluntary Allocation Law, but was forced to give it up late last month. At that time the Justice department threw out a voluntary scrap allocation scheme blueprinted by Commerce officials. Justice saw trouble ahead because of the price-fixing ban in the voluntary allocation law.

U. S. scrap dealers are not especially worried about dropping the plan, although all but a handful gave it their approval early in September. They feel that the interest created since that time has done them some good. In the last several weeks, trade sources say, they have been picking up contracts from speculative scrap operators who are now selling out. Regular dealers figure that:

In the first place, the speculators—most of them new to the game—didn't want to be around when the government turned the heat on. Besides, a number of them discovered that it might be easy enough to get a German dealer to sell them some scrap, but that it takes a lot of capital really to sew up a contract. For example, even if the U. S.-British Joint Export-Import Agency at Frankfurt approves a dealer, the buyer has to put up 90 percent of the contract's value before it can be loaded for shipment. That can run into big money—close to $1,500,000 for a 50,000-ton shipment.

So the "carpetbaggers" are packing up, unloading what they can, and checking out. End result is that regular scrap dealers are now getting an increasing share of German business.



A GRACEFUL SUSPENSION BRIDGE, with a 2,050-ft. span, would cross the Delaware River south of Philadelphia under plans for development of the city's port area. The bridge would carry six lanes of vehicular traffic.

$91 million Philadelphia port plan includes major civic face-lifting

If the two states concerned approve the $91,000,000 proposal for the establishment of a virtual port authority along the Delaware River, the results will provide an engineering face-lifting for the Philadelphia-Camden waterfront.

Submitted to the Delaware River Joint Commission for approval by the commission and by the legislatures of Pennsylvania and New Jersey (ENR Dec. 2, p. 15), the report calls for a re-statement of the commission's functions that would establish it virtually as a port authority. The commission is now confined to operation of the existing Philadelphia-Camden Bridge.

If the plan is approved, the commission's duties would exceed those of the Port of New York Authority, for example, in that the commission would actually operate the ports of Philadelphia and Camden, in addition to building and operating transportation facilities. One of the basic reasons for the report was a search for some means of halting a continuing loss of port business.

Biggest single item of construction under the new plan would be a $43,000,000 suspension bridge across the Delaware that would incorporate a 2,050 ft. center span to provide access to Philadelphia from the south, and to bring into closer communication a number of New Jersey suburban areas.

The Knappen Tippetts Abbett Engineering Co., of New York City, submitted the report on a long-range basis, providing for progressive construction work over a period of years. It recommended, in addition to the bridge, a port railway system, expansion of rapid transit lines and rapid transit service over the existing Philadelphia-Camden bridge, construction of an elaborate approach-road system for the new bridge, rehabilitation of existing piers on both sides of the river, central truck terminal, and many other features that would change the appearance of the two cities.

The $32,000,000 pier construction program, incidentally, is recommended only if it becomes apparent that the commission cannot take over and modernize existing piers owned by the two cities. This latter program would cost about $7,500,000, the engineers said, and would return to use many piers now leased out as warehouses.

The report itself is somewhat unique, in that in addition to engineering and financial matters, it concerns itself with a public relations program which the engineers feel to be necessary to restore the port's freight-handling position; and with legal matters involved in the necessary legislation that would have to be approved by the two states to implement the program.

In addition to the many projects recommended, the report also takes up nearly one hundred other matters, proposed in past years. Most of these—including a new administration building for the joint commission—were discarded at least for the present, after a thorough study of economic and engineering feasibility.

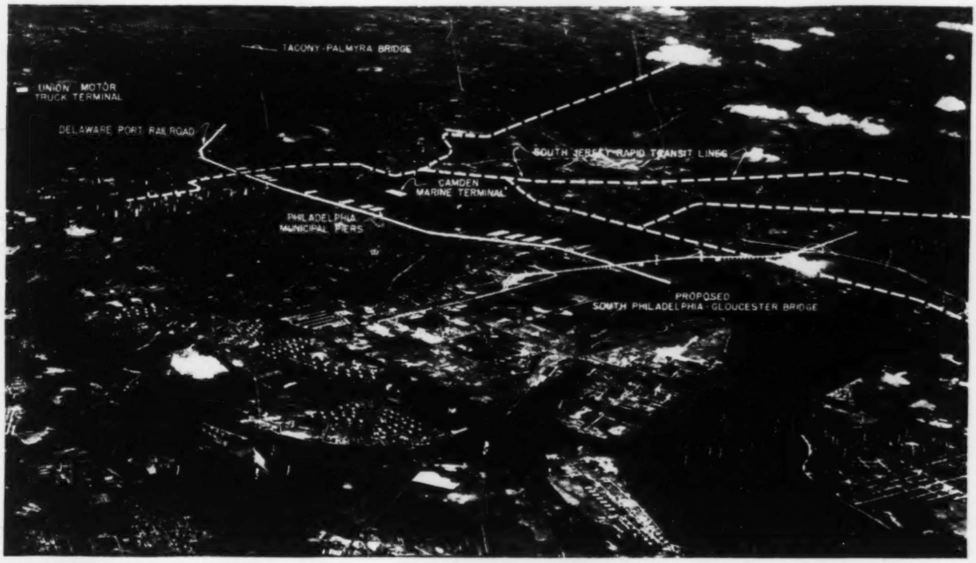
Pollution of the Delaware River is recognized by the report as being a deterrent to its use by passenger ships and freighters. Shippers are discouraged from using the port, and industries cannot use the raw river water in their processes. Recreation facilities are hampered and the once thriving shad fisheries are no more.

Formation of the Interstate Commission on the Delaware River Basin (INCODEL) has greatly advanced efforts to eliminate this pollution problem. The Knappen study discusses the degree of pollution and sources of contamination, recommending education of the general public in the problems of pollution abatement.

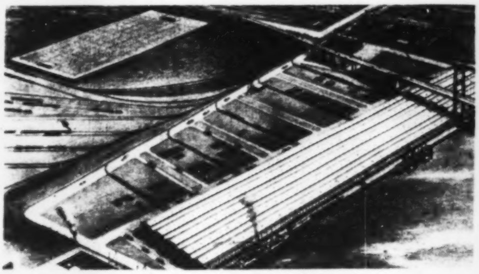
Long-range plans

Unlike many port-development programs which concern themselves with coping with a rising traffic volume, this program also contains a section devoted to means of increasing motor traffic over the new bridge and other facilities. The development of the towns south of Camden as large residential areas for metropolitan workers is seen as a desirable activity for the commission, and sections of the report are devoted to this phase. Development of a $32,000,000 rapid transit lines that would tap this area is also recommended.

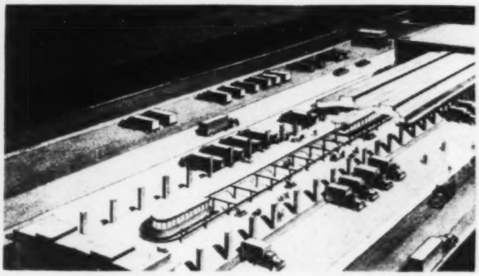
Among the recommendations for


TACONY-PALMYRA BRIDGE
UNION MOTOR TRUCK TERMINAL
DELAWARE PORT RAILROAD
SOUTH JERSEY RAPID TRANSIT LINES
CAMDEN MARINE TERMINAL
PHILADELPHIA MUNICIPAL PIERS
PROPOSED SOUTH PHILADELPHIA-GLOUCESTER BRIDGE

OVERALL PLANS for the development of the ports of Philadelphia and Camden include rapid transit lines in South Jersey (dotted lines), a port railroad on the Pennsylvania side (solid line), pier work on both sides of the river, a new bridge in South Philadelphia, and purchase of two bridges upriver. A port authority would operate all building and transportation facilities.



MARINE TERMINAL development would include construction of new cargo sheds, improvement of wharfage facilities, and connecting railroad links.



UNION TRUCK TERMINAL would be a comparatively small installation to be used as "pilot plant" for later expansion and improvement.

the future are a small boat harbor, a produce market and a general merchandise warehouse for use in connection with port operations. The report emphasizes that these projects should not be undertaken until such time as the projects previously mentioned are completed.

There exists a great interest in boating, and moorings are inadequate to handle the large number of pleasure craft owned by residents of the area. The suggested produce market, estimated to cost $8,000,000 has previously been proposed by Department of Agriculture studies. A modern merchandise warehouse, as an auxiliary to the operation of the port, is recommended for future consideration.

PROPOSED NORTH

APPROACHES to proposed new bridge would tie in to the proposed north-south freeway along the Philadelphia river front, and make use of elaborate interchanges to permit free flow of traffis into the city.

OBITUARY

James H. Sturdevant, 66, civil engineer who spent many years in Syracuse, N. Y., died Dec. 22 in Augusta, Ga. A civil engineering graduate of Cornell University, 1905, he did work on the N. Y. State Barge Canal, and was associated with the New York State Highway Department for 20 years. In 1939 he moved to Beaufort, S. C., and during World War II he was with the Army Engineers at the Columbia, S. C., base. At the time of his death he was connected with Patchin and Zimmerman Engineering Co., in Augusta.

Richard C. Beckett, 55, sanitary engineer for the Delaware State Board of Health, died Dec. 16 at Wilmington, Del. Beckett also was executive secretary of the Interstate Commission on the Delaware River Basin. He was a graduate of Pennsylvania State College, 1916, and at one time served as assistant engineer on the Pennsylvania State Department of Health.

William S. Hall, 87, former professor of civil engineering at Lafayette College, Easton, Pa., where he was associated for 64 years, died Dec. 18, at Easton. He was graduated from Lafayette in 1884 and joined the faculty. He taught civil engineering and mathematics and headed the mathematics department from 1912 to 1934, when he retired. He was clerk of the faculty for 40 years.

Eric Haquinius, 54, research analyst for the Army Map Service, died Dec. 25 at Washington, D. C. A native of Sweden, he attended Lund Gymnasium, and studied civil engineering at the University of Sweden. He came to the United States in 1916 and after the first world war joined the Geological Survey as phototopographic engineer. From 1933-34 he was state supervisor for Texas for the USGS and was also chief of surveys in the Brazos River Conservation District. Just before World War II he worked as chief engineer of the Red River ordnance depot and during the war served as a lieutenant colonel in the engineers in North Africa and Italy. He returned recently from a round-the-world trip for the Army and was preparing for an assignment in Germany.

Henry B. Drowne, 66, former assistant engineer of the Rhode Island Board of Public Roads, died at Lake Worth, Fla., on Dec. 27. He was professor of civil engineering at Brown University for several years before World War I; taught highway engineering for a time at Columbia University; and later became associated with the Lane Construction Co. Mr. Drowne was co-author with Arthur H. Blanchard of a textbook on highway engineering and was also associate editor of the "American Highway Engineering Handbook".

Theodore B. Bush, 61, engineer of the Honolulu, T. H., Bureau of Plans died Dec. 22. Mr. Bush received civil and electrical engineering degrees from the Pennsylvania State College in 1910. He first went to Hawaii in 1914, joining the city public works department in 1920.

MAJOR MEETINGS

Associated Equipment Distributors, annual meeting, Stevens Hotel, Chicago, Ill., Jan. 16-20.

American Society of Civil Engineers, annual meeting, Hotel Commodore, New York, N. Y., Jan. 19-21.

Canadian Construction Association, Royal York Hotel, Toronto, Ont., Jan. 23-26.

Concrete Industries Exposition, Cleveland Public Auditorium, Cleveland, Ohio, Jan. 31-Feb. 3.

American Road Builders Association, annual meeting, Willard, Mayflower and Statler Hotels, Washington, D. C. Feb. 7-9.

National Crushed Stone Association, Hotel New Yorker, Feb. 7-9.

National Ready Mixed Concrete Association, 19th annual convention, Hotel New Yorker, New York, N. Y., week of Feb. 14.

National Sand and Gravel Association, 33d annual convention, Hotel New Yorker, New York, N. Y., week of Feb. 14.

National Association of Home Builders, annual convention and exposition, Stevens Hotel, Chicago, Ill., Feb. 20-24.

National Council for Stream Improvement, Waldorf-Astoria, New York, N. Y., Feb. 21-23.

American Concrete Institute, 45th annual convention, Hotel Pennsylvania, New York, N. Y., Feb. 22-25.

Associated General Contractors of America, 30th annual national convention, Waldorf-Astoria Hotel, New York, N. Y., Feb. 27-March 3.

Association of Highway Officials of the North Atlantic States, 25th annual convention, Hotel Statler, Boston, Mass., March 1-3.

American Concrete Pipe Association, 41st annual convention, Richmond, Va., March 3-6.

American Institute of Architects, annual meeting, Rice Hotel, Houston, Tex., March 15-18.

American Railway Engineering Asn., Palmer House, Chicago, Ill., March 15-17.

John Randolph Thrasher, Jr., 47, resident engineer for the recently completed Ladd Memorial Stadium, died Dec. 27, in Mobile, Ala. Mr. Thrasher was graduated from the University of Alabama and later was with the Tennesee Highway Department. He served for many years as captain in the U. S. Corps of Engineers and was assistant to the chief of the operation division of the Mobile District office.

James F. Covington, 56, assistant resident engineer of the Army engineers, Wilmington, N. C., district, at Fort Bragg, died at Bennettsville, S. C., Dec. 19.

James Herlong, 74, retired civil engineer, who built many streets in Miami, Fla., while connected with the city's engineering department, died Dec. 24. He had lived in Florida for 62 years.

Ernest H. Groot, 73, former engineer in charge of Ohio River locks and dams from Madison, Ind., to Cairo, Ill., died at Louisville, Ky., Dec. 30. He had retired in 1944 after 42 years with the U. S. Engineers. He was an engineering graduate of Ohio Northern University.

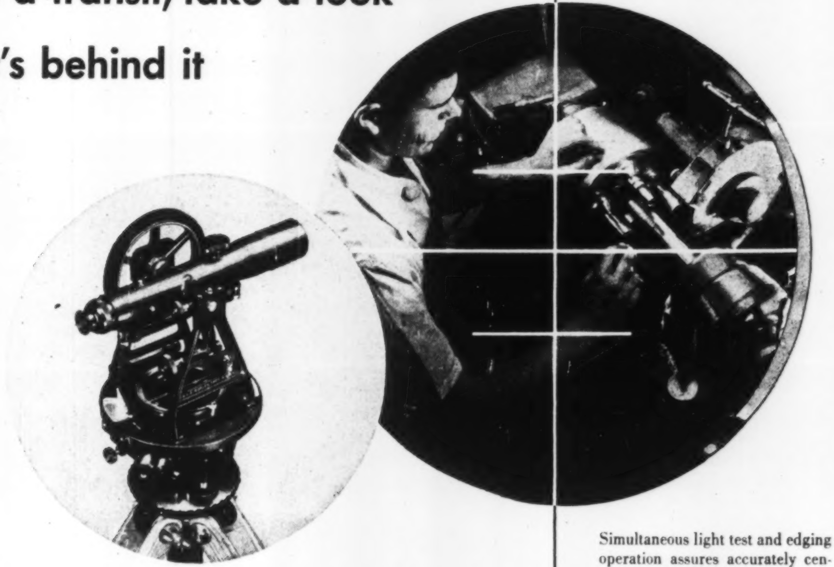
Fred C. Eisnaugle, 48, bridge superintendent in the Franklin County, Ohio, engineering department since 1942, died Dec. 27.

W. E. Vest, 82, superintendent of the city water department at Charlotte, N. C., for 36 years, died Dec. 30. He obtained his civil engineering degree from the University of Kentucky and joined the Southern Railway as a civil engineer in 1889, serving with the railroad until he became superintendent of the Charlotte water department in 1910. He was the first North Carolinian to receive an honorary life membership in the American Water Works Association and was a director of the association in 1930-31.

Harold H. Johnson, 61, superintendent of operations and maintenance for Region 6 of the Bureau of Reclamation, Billings, Mont., died there Dec. 17. A 1910 civil engineering graduate of the University of Wisconsin, he went into reclamation work immediately upon graduation.

Charles H. Barnes, 80, an Indiana contractor for 45 years, died at Anderson, Ind., Dec. 29. He had built a large number of post office buildings.

While you're looking through a transit, take a look at what's behind it



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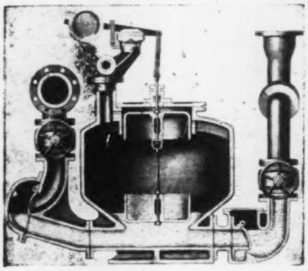

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Cyclotron parts make transport puzzle

With half of the intricate job of moving huge chunks of steel completed, Carnegie Institute of Technology is now awaiting delivery of the coils for the magnet of what will be the world's most powerful cyclotron.

The cyclotron, to be set up on a site at Saxonburg, Pa., will be capable of developing 400 million volts of energy with which to bombard atoms to aid nuclear research. Although somewhat smaller than other cyclotrons now in existence, the Tech machine will be more powerful than any now operating, and weigh in total about 1,500 tons.

First units of the huge machine—fabricated at the Homestead Works of the Carnegie-Illinois Steel Corporation—include twelve separate pieces weighing a total of more than 3,000,000 lb.

Shipment of the finished parts from Homestead to Saxonburg—a distance of 28 miles—was no simple job. Among other complications, there were only six flat cars in the United States capable of supporting the gigantic steel blocks.

At the Saxonburg railway siding a 150 ton locomotive crane with a special 65 ft. structural boom was used to load the blocks on truck-trailers.

The crane lifted each block from the flat cars and trucks backed onto a special gravel and board temporary roadbed. Workers twisted the block slightly until it was in exact position in which it was to rest on special timber piles built on the truck trailer, and the beam was then lowered onto the trailer. The 125-ton trailer trucks settled visibly and the crane released the weight, and finished with only about 2 in. of clearance to the road.

The trucks moved up the road in low low-gear and low third gear, sometimes reaching eight miles per hour and sometimes creeping along at less than one mile per hour.

When trucks reached the nuclear research center, they were backed into the partially finished cyclotron room which has extra large doors and a driveway, and workmen, using four 100-ton handle lever jacks, managed to jack the pieces off the truck to realease the vehicle.

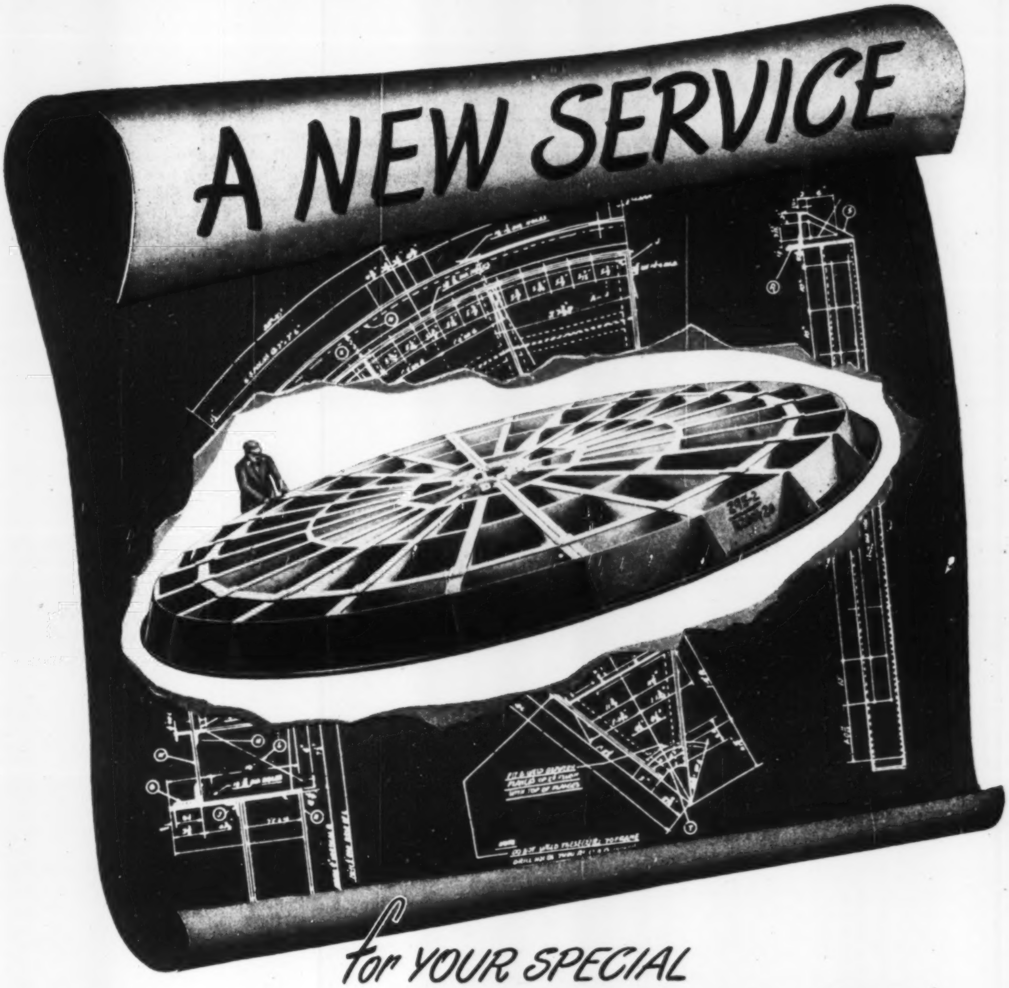
The magnet, of an improved design and representing a radical departure in design will produce a magnetic field strength greater than that obtained in any other cyclotron, Tech scientists have announced.

The next great shipping problem facing Carnegie physicists will be the shipment of the magnet coils from the Brooklyn Navy Yard in New York City to the Research Center. Since the coils are too high for railroad tunnels, and too wide if loaded horizontally to pass other trains en route, present plans call for the monster equipment to travel by motor truck overland. As a last resort, however, the school is prepared to carry the coils by water around the Gulf of Mexico and up the Mississippi River, ending with a short overland haul to Saxonburg, Pa., the site of the new machine.

◆

Also Recorded

Helicopter Delivery—The United States Forest Service recently solved the problem of getting construction timbers to the top of 2,500-ft. Pequawket Mountain near Kearsarge, N. H., by using a helicopter. The timbers will be used to rebuild a fire lookout station. An average of 250 lb. was carried on each trip. Government officials figured it cheaper to fly the material than to have men "pack" it.



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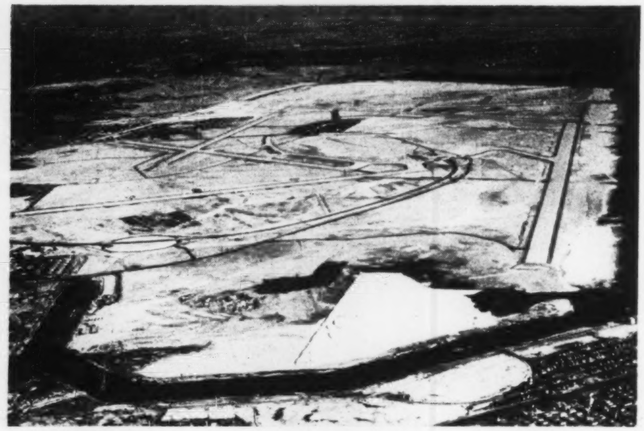

NEW YORK INTERNATIONAL AIRPORT is still the scene of much construction activity despite the complete appearance given in this air view. Bids were recently taken on the double hangar which had been designed both in steel and concrete (ENR, July 29, p. 9). Low bid was in steel—$4,212,865 by Stock Construction Corp. of New York. Low bid for concrete construction was $4,333,600, submitted jointly by Corbetta Co., Inc., and Del Balso Construction Corp.

Airport Activities

Mayor Thomas A. Burke of Cleveland, Ohio, will ask for another vote on the city's $9,000,000 airport bond issue at the next November election. The official count on the recent vote showed that the airport proposal received only 60 per cent of the 65 per cent majority needed.

It is expected that the federal government may soon approve plans for the half-millon dollar adminstration building for the International Airport at Tampa, Fla. A special survey has just been made by the Civil Aeronautics Authority.

A great deal of other airport work was under way or planned last week, as cities were assured of funds to finance their plans.

The master plan of Boise, Ida., for long-range improvement of the municipal air terminal has been approved by CAA. Construction is expected to start next spring on a new taxiway and on the remodeling of the terminal building.

Work on the remodeling and expansion of Sky Harbor airport at Phoenix, Ariz., is going ahead with $1,500,000 realized from revenue bonds recently approved. The $5,500,000 development will require about three years for completion.

Spencer Construction Co., Carrollton, Tex., has the grading and drainage contract at $700,795 for the $11,500,000 greater Fort Worth International Airport at Arlington between Fort Worth and Dallas, Tex.

Brig. Gen. Kenneth Cooper, assistant adjutant general of Ohio, has announced plans for a $1,000,000 installation at the Mansfield Airport to house the 164th Fighter Squadron of the Air National Guard.

For the Schenectady County, N. Y., airport a $1,500,000 U. S. Air Force construction program has been announced for Air National Guard facilities.

First work has started at Houston, Tex., on the $6,000,000 improvement program for the municipal airport. Russ Mitchell is the contractor for taxiways, drainage, a 500-ft. runway extension and four parking aprons.

The Illinois Department of Engineering and Architecture has approved expenditure of $260,000 to improve airports in Alexander County, Murdale, and Harrisburg.

McCarthy-Pohl Contractors, Inc., have submitted a bid of $1,690,161.50 for improvements at Lambert-St. Louis Municipal Airport, including 2,900,000 cu.yd. of grading and 28,000 lin. ft. of 8-in. to 48-in. pipe drains.

Construction projects have been completed by the Illinois Department of Aeronautics on four airport sites at Alton, Lacon, Salem and Mt. Vernon.

A multi-million-dollar Class 5 airport is to be constructed in the southwestern edge of Shreveport, La. Work on the new airport, which will accommodate the largest commercial aircraft will get under way in the near future.

Highway Projects

The city council of Baltimore, Md., is considering the publication of a long-range master plan for the city's highways. Commissioner Arthur D. McVoy says the commission is working with the Maryland State Roads Commission, county officials and all other agencies concerned. The study of expressways and a truck route are on the agenda, while the department of highways of the District of Columbia has asked for $4,263,543 for seven major projects including the reconstruction of Military Road N. W. through Rock Creek Park.

Other highway developments:

A contract for $3,100,000 worth of work has been let for the 9,536-ft. Nueces Bay causeway at Corpus Christi Tex. Fagan Mason, resident engineer will supervise the job. Austin Bridge Co., Dallas, has the contract for the causeway, and Brown & Root for the approaches.

City officials of Tampa, Fla., hope to get long-delayed street repair and trolley removal under way soon. The new city budget provides for street work.

In the meantime, several cites in Illinois on the Mississippi River opposite St. Louis, Mo., are asking the state to help them in flood control problems. Representatives of East St. Louis and the East Side Levee, and Sanitary District urged a $10,000,000 appropriation to pay for projects to protect their portion of the "American bottoms" lowland area.

Belleville officials, concerned by property damage resulting from overflows of Richland Creek, asked state help in financing a $1,500,000 culvert and bridge improvement program.

He said building of facilities to channel this excess water directly into the Mississippi River would go far toward safeguarding Granite City, Venice, Madison and Nameoki, as well as East St. Louis, from repetitions of a costly 1946 inundation.

Seattle Sewer Project

Plans are nearing completion at Seattle, Wash., for the first unit of a $7,500,000 sewer project in the Lake City sewer district, north of the city, reported to be the largest sewer project ever undertaken in the Pacific Northwest.

The project includes a $1,500,000 treatment plant, 11 lift stations and 175 miles of sewer lines. General obligation bonds totaling $800,000 already have been voted and residents of the area will vote Jan. 18 on authorization for issuance as needed of utility revenue bonds amounting to $6,700,000.

The sewer district comprises 7,400 acres in which a count last August showed 9,150 homes, all served by septic tanks. Installations will be paid for either by assessment of $1. per front foot plus a service charge of $2.50 a month, or $3. a front foot plus a service charge of $1.25 a month, or by an equivalent combination of assessment and monthly charge.

Engineers Parker & Hill are preparing plans for the sewer lines while James W. Carey & Associates are planning the treatment plant and lift stations.

The primary and secondary treatment plant will be of the activated sludge type, planned for a capacity of 7,000,000 gal. of sewage a day, based on a projected population of 70,000 for the area. Construction will be of the common-wall unit type, with the first unit having a capacity of 1,000,000 gpd. An outfall line will carry the treated sewage 700 ft. out into Lake Washington, 25 miles long, which borders the district on the east side.

Vacuum filtering is being considered in place of sludge beds for drying the inactivated residue, because it is difficult to carry on outdoor drying during winter months.

Los Angeles Auditorium

A civic auditorium and an opera house for Los Angeles to cost between $40,000,000 and $50,000,000 has been proposed by Greater Los Angeles Plans, Inc., a non-profit group of businessmen backed by Mayor Fletcher Bowron, and by city and county officials. Ground for the two projects has been purchased and a group of architects under Wallace K. Harrison is making sketches and plans.

The auditorium would be on a 23-acre site, with space for parking 5,000 automobiles. Architectural drawings picture the auditorium as an oval, glass-walled building with a maximum seating capacity of 20,000. The opera house, to seat 4,500, features automatic sliding walls to permit changes in seating capacity.

Actual construction is expected to get under way by the end of 1949, with bids in May or June, following completion of plans now being formed in the architects' offices in New York and Los Angeles.

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MEN AND JOBS

Bryon P. Lyons, of Baton Rouge, has been appointed chief engineer of Louisiana State Department of Public Works. Mr. Lyons succeeds Leo Odom who resigned last May to go into private practice. **C. A. Bell,** southwestern district engineer, who has been acting chief engineer, will return to his former position. Mr. Lyons received his engineering degree in 1912 from Tulane University.

Raymond L. Stevenson has resigned as county engineer of Black Hawk County, Iowa, to become an engineer for the Alfred Olson Construction Co., of Waterloo. He is succeeded by **Clarence Baldwin,** also of Waterloo.

M. H. Lander, of Wilmington, N. C., is supervising engineer on the construction of 16 jetties designed to halt erosion of the shore at Kure Beach, N. C.

L. O. Hopkins, Nashville, Tenn., has been made consulting and assistant engineer by the Harrison County, Miss., commission to aid in building movable and mechanical draw span bridges in the county. He will work on the Bay of Portage, Adam's bridge over Wolf River, Handsboro bridge over Bayou Bernard, Popp's Ferry bridge over Black Bay of Biloxi, and possibly Rouse's bridge over Wolf River.

Warren W. Clark has opened an office in the Pacific Bldg., Salem, Ore., to specialize in structural engineering. He was graduated from Iowa State College in 1936. For six years he was with the Natural Gas Pipeline Co. of America prior to the war. After four years in the Army in the Southwest Pacific, he joined G. R. Boatwright, civil engineer of Salem, and continued with him until Nov. 1.

Jack W. Rodner, Bureau of Reclamation engineer, has been named district manager of the Tulare Basin District at Fresno, Calif. He succeeds Robert B. Cozzens, resigned. As district manager of the Lower San Joaquin District for the last two years, Rodner has directed Central Valley Project work on the Tracy pumping plant, the Delta-Mendota Canal, and the Contra Costa canal. The Tulare Basin District includes all Bureau work on the Friant Dam, the Friant-Kern Canal, and the Kings, Tule, and Kern Rivers. Rodner is a graduate engineer of the University of Idaho.

Jack Ammann, photogrammetric engineer of San Antonio, Tex., announces the opening of an eastern office at 34 Webster Avenue, Manhasset, N. Y. **William H. Meyer, Jr.,** will be manager.

Edward P. Dolan has been named town engineer of New Canaan, Conn.

Col. Francis H. Falkner, Pittsburgh, Pa., district Army engineer, who is ill, has been replaced temporarily by **Col. Alexander M. Neilson,** Huntington, W. Va., district engineer.

David Jack, city engineer of Kingston, Ont., has resigned to go with the Construction and Engineering Co., and will be succeeded by **Howard S. Dick,** deputy city engineer, as acting city engineer until a permanent appointment can be made.

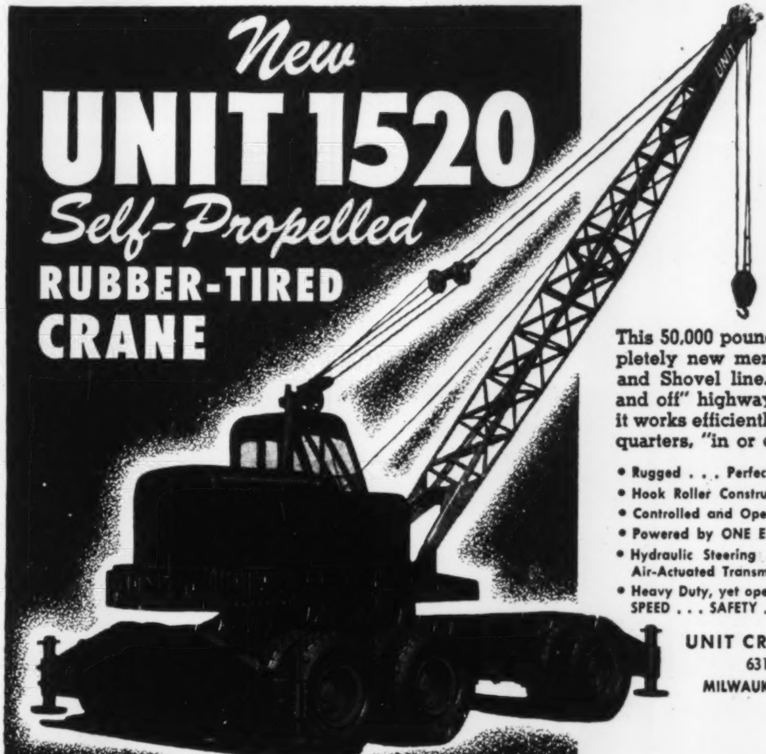
Harry C. Anderson, of the public works staff in British Columbia, has been appointed chief engineer. **N. W. Macpherson,** formerly senior executive with the public works department in Alberta, has been named as deputy minister of public works. **Neil M. McCallum** has been appointed assistant chief engineer and **Evan S. Jones** maintenance engineer. These four officials will serve as the personnel of the B. C. Highway Board, which advises as to the cost on all highway planning and construction.

Vincent B. Clarke, city engineer of Ansonia, Conn., has been named to a special committee to study pollution problems in the state. **Richard Martin,** director of the State Water Commission, is heading the pollution study program. Ansonia is included in 14 towns and cities of Connecticut where sewage treatment plants will be built in the near future.

Frank M. Williamson, for the last two and a half years design engineer of the Allegheny County, Pa., Sanitary Authority, has gone with Gannett Fleming Corddry and Carpenter, Inc., as sanitary engineer in charge of the sanitary section of the company at Pittsburgh. For 20 years he was in the sewage treatment plant design section of the Sanitary District of Chicago. During the war he served in the Corps of Engineers and the Sanitary Corps, and was sanitary engineer with the military government in Okinawa and Korea. Another accession to the Pittsburgh office is **Quentin L. Hampton,** formerly of the Allegheny County Sanitary Authority, who is sanitary design engineer. He served in the Pacific with the Army Corps of Engineers and with the U. S. Engineers Department in Florida.

William Brewster, 8th, West Virginia district engineer of the Public Roads Administration, retired recently after 29 years of continuous service. His successor will be John C. Cobb, highway engineer of the P.R.A.'s Charleston, W. Va. office. Mr. Brewster went to West Virginia in 1919 after a tenure with the Cuban Department of Public Works, the highway department of Manhattan Borough, New York, and engineering firms in New York and New Jersey. He retired from his federal position because of the age limit.

P. T. Samuel, chief of the marine division in the Philadelphia District, Corps of Engineers, will retire soon. As chief of the division, he was responsible for the design and construction of all major items of floating plant for the Corps of Engineers. Since 1939, when he first assumed charge, the program of the division has been greatly accelerated. During the war under Mr. Samuel's guidance it successfully coped with the unprecedented demand for design and construction of floating plant for military operations.



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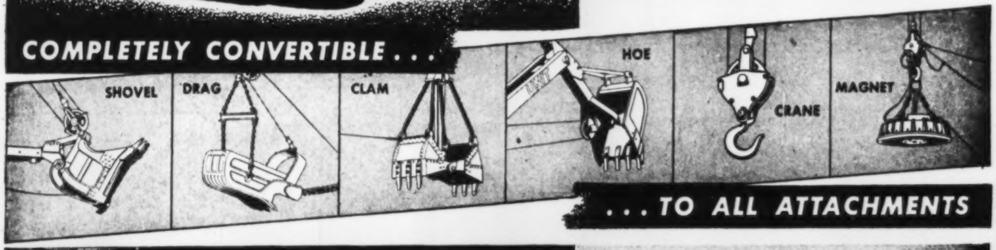
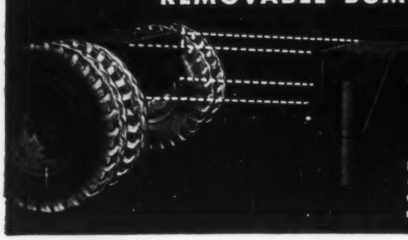


. . . TO ALL ATTACHMENTS

REMOVABLE BUMPERS



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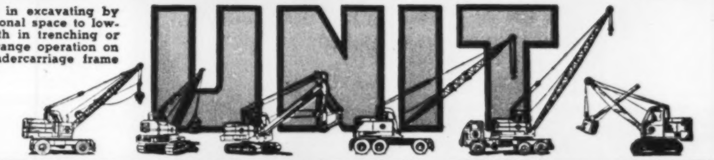

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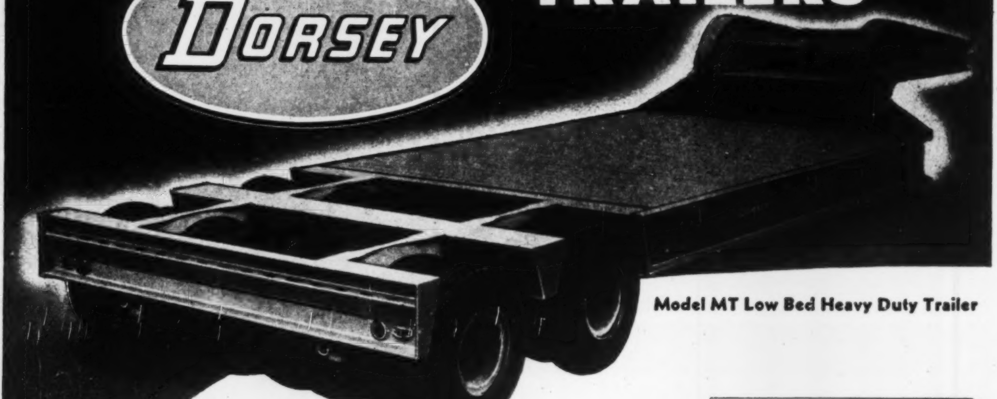
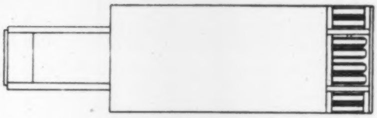
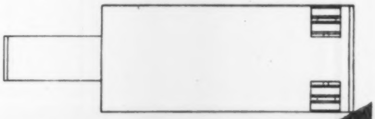


Model MT Low Bed Heavy Duty Trailer



Model M 15-20-25 Tons

Model MTS 15-20-25-30-35 Tons



Model MK 10-15 Tons

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Unusually rugged, sturdy and compact, the Dorsey Low Beds will move your heaviest equipment, power shovels, tractors, cranes, or stationary machinery, with safety and efficiency.

The Dorsey Low Bed Trailers have the lowest possible center of gravity and are equipped with the safest braking system, larger models being hydraulically operated through master cylinder actuated either by air or vacuum.

Here is a series of real Low Beds, with minimum platform height and including, as Standard Equipment, rear loading ledge, air or vacuum brake equipment, lights and reflectors and tool box.

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Get a Dorsey

MODERN *Designed* TRANSPORTATION

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DEVELOPMENTS ABROAD

BERLIN BRIDGE REBUILT–Spanning the Havel River in western Berlin, this bridge is on the main route from British Gatow Airport to the center of the blockaded city. Importance of airlift traffic makes bridge completion vital. (Wide World Photo)

Transport

India—The government proposes to spend a billion dollars over a period of seven years for the improvement and expansion of railway transport. Orders for 470 locomotives at a cost of $55,000,000 were placed during the past year in the U. S. and Canada alone.

India (including the princely states) possessed 33,984 miles of railroad as of last April. All of it, except 1,152 miles, is owned by the nation and administered by the government. Employees, officers and men total about a million.

Highway construction in India has nearly reached the first year's target of its five-year program, estimated to cost $207 million. The first year will end in March, and with two months still to go, about 6,000 out of 6,500 miles of new roads have been built.

Mexico—This country's good roads program, begun in 1925, will be pushed more than ever in 1949, with a view to improving the national economy by providing more and more adequate overland transportation services. In making this announcement, the Ministry of Communications and Public Works has stated that the road plans feature completion of the southern Mexican section of the Pan-American Highway.

Italy — Construction work on Rome's new central railway terminal has resumed, and engineers report that the new group of buildings, which will house offices as well as travel facilities, will be ready for public use by 1950. Plans for the Rome Termini station were originally drawn in 1938.

Two wings were completed prior to suspension of construction in 1943 because of the war. Work is now proceeding on the central building which will join the two completed sections.

Greece—Completion of the 430-mile Athens-Salonika highway has been announced by Colonel D. W. Griffiths, who heads up the detachment of United States Army Corps of Engineers advisors in Greece.

This new highway, started over a year ago, runs roughly north from Athens through many principal towns in Eastern Greece. It connects with important rail and lateral highway routes which tie it up with the rest of the country.

Industrial Construction

Norway—Construction of pig iron and aluminum producing units, now under way at Aardal in western Norway, are slated for completion by 1950. This will mark end of a 40-year building program involving construction of every phase of a modern hydroelectric production center—from dams and conduits to an underground power station, producing facilities, and a modern industrial city.

Present output of the Aardal aluminum plant, which has been operating since early this year, is 10,000 tons per annum. This will be lifted to 12,000 tons by the beginning of 1949. By January, the first electro-pig-iron furnace at Aardal will go into production and provide up to 30,000 tons each year.

Mexico–Southern Pacific Railway of Mexico will spend $18,500,000 on various projects, featuring right-of-way improvements, bridges, and stations. The railroad has been restored to its parent company, the Southern Pacific Railway, after being under control of the government since June 7, 1947. At that time it was taken over by the government to end a general strike. It is Mexico's largest privately-owned railroad.

Austria – To help supply steel needed for recovery in Austria, E.C.A. has recently approved use of $4,300,000 in construction of a modern blooming mill for making steel ingots for the Alpine-Montan Gesellschaft, Austria's largest steel company. The blooming mill will be located in Donawitz in the Austrian Alps.

Because Austrian engineering specialists found that superior equipment and earlier delivery could be obtained from American manufacturers than from European sources, the blooming mill and electric motors will be supplied by U. S. firms. The new electrically-driven mill replacing a decrepit steam-driven plant, is designed to produce 40,000 metric tons of blooms and slabs a month on a two-shift basis.

Australia–A steel factory building, in sections, is enroute to Australia from Canada. The factory and machinery are to be assembled upon arrival in Australia to produce cement, much needed in the Antipodes. In order to prevent the sections of the building and machinery from moving and damaging the steamers while on the seas, they were welded to the upper and lower decks. Two steamers were required for the operation.

Housing

Australia—During the coming fiscal year there will be 48,000 new houses built in Australia, and work will start on 56,000 more. This estimate was given by the Minister for Public Works and Housing, at a recent conference of Federal and State Housing Ministers in Canberra.

At a similar conference in 1946, the target figure was 60,000 completed houses each year. It is now suggested that to overcome the housing lag, the construction of pre-fabricated buildings should be financed under an agreement between the federal and state governments. It is also pointed out that production of houses would be greatly helped by the arrival of more displaced persons from Europe.

India—A loan of $6,000,000 from the Government of India to the Bombay Government has been sanctioned for its housing program. The Bombay Government has set apart a sum of $12,000,000 for new houses; of this amount, $7,500,000 will be spent on acquiring land and the construction

(Continued on p. 29)

THE MEMBERSHIP OF A C. I. P. Century Club now has

The Cast Iron Pipe Century Club is probably the most unique club in the world. Membership is limited to municipal, or privately-owned, gas and water supply systems having cast iron mains in service for a century or more.

Although the Club is formally established, there are no dues, no regular meetings, and no obligation other than to inform the Recording Secretary if and

96%

OF ALL 6-INCH AND LARGER CAST IRON WATER MAINS EVER LAID IN 25 REPRESENTATIVE CITIES ARE STILL IN SERVICE.

Based on the findings of a survey conducted by leading water works engineers.

CAST IRON PIPE

DISTINGUISHED CLUB...

23 Members!

when the qualifying gas or water main is taken out of service, or, sold for re-use.

In spite of the unique requirement for membership, the Club roster grows, year by year. And why not, when answers to a questionnaire, mailed to gas officials in 43 large cities, show that *original* cast iron mains are still in service in 29 of the cities. And a survey sponsored by three water works associations, indicates that 96% of all 6-inch and larger cast iron water mains ever laid in America are still in service.

If your records show a cast iron main in service, laid a century or more ago, the Club invites you to send for a handsome framed Certificate of Honorary Membership. Address Thomas F. Wolfe, Recording Secretary, Cast Iron Pipe Century Club, Peoples Gas Bldg., Chicago 3, Illinois.

CLUB ROSTER

BUREAU OF WATER, DEPT. OF PUBLIC WORKS
Baltimore, Maryland

CONSOLIDATED GAS ELECTRIC LIGHT & POWER CO.
Baltimore, Maryland

PUBLIC WORKS DEPT., WATER DIVISION
Boston, Massachusetts

BOSTON CONSOLIDATED GAS CO.
Boston, Massachusetts

BOARD OF WATER COMMISSIONERS
Detroit, Michigan

CITY OF FREDERICK WATER DEPT.
Frederick, Maryland

THE HARTFORD GAS COMPANY
Hartford, Connecticut

BUREAU OF WATER
Lancaster, Pennsylvania

LOUISVILLE GAS & ELECTRIC CO.
Louisville, Kentucky

CITY OF LYNCHBURG WATER DEPARTMENT
Lynchburg, Virginia

MOBILE GAS SERVICE CORP.
Mobile, Alabama

NEW ORLEANS PUBLIC SERVICE, INC.
New Orleans, Louisiana

DEPT. OF WATER, GAS & ELECTRICITY
New York, New York

DEPT. OF PUBLIC WORKS, BUREAU OF WATER
Philadelphia, Pennsylvania

PHILADELPHIA GAS WORKS CO.
Philadelphia, Pennsylvania

BUREAU OF WATER
Reading, Pennsylvania

DEPT. OF PUBLIC UTILITIES
Richmond, Virginia

DEPT. OF PUBLIC UTILITIES, WATER DIVISION
St. Louis, Missouri

THE CONSUMER'S GAS CO. OF TORONTO
Toronto, Ontario

DEPT. OF PUBLIC WORKS
Troy, New York

WILMINGTON WATER DEPT.
Wilmington, Delaware

CITY OF WHEELING WATER DEPT.
Wheeling, West Virginia

YORK WATER COMPANY
York, Pennsylvania

SERVES FOR CENTURIES

Small homes offer big value

They're Radiant Heated with National STEEL Pipe!

National Steel Pipe was used for the heating coils of a large number of these houses because of its low cost, proved dependability, and ease of installation.

Shackelford Homes, Prairie Village, Kansas City, Missouri.

SMALL home buyers are getting *real* value in Prairie Village, Kansas City. These Shackelford Homes offer a gas fired radiant heating system built with NATIONAL Steel Pipe.

Prospective owners are looking forward to the comfort of warm, draft-free floors, and uniform heat throughout the house. Furthermore, they anticipate low operating cost of the radiant heating system.

NATIONAL Steel Pipe is ideal for radiant heating systems just as it is ideal for other types of hot water or steam heating systems. It is low in first cost, easy to bend and easy to weld. It expands at the same rate as concrete and plaster and acts as a reinforcement for the floor. NATIONAL, the largest selling pipe in the world for heating purposes, offers the additional advantages of the Scale Free and Spellerizing processes. This means that the pipe interior is clean, smooth, free from mill scale, with minimum frictional resistance!

Write for free 48-page book, "Radiant Heating with National Pipe". It brings you practical information as a basis for planning and installing an efficient steel pipe radiant heating system. Address National Tube Company, Frick Building, Pittsburgh 19, Pennsylvania.

NATIONAL TUBE COMPANY, PITTSBURGH, PA.
COLUMBIA STEEL COMPANY, SAN FRANCISCO,
PACIFIC COAST DISTRIBUTORS
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

USS

NATIONAL Steel PIPE

UNITED STATES STEEL

(*Continued from p. 25*)

of new tenements. Nearly 3,000 tenements are either complete or nearing completion in Bombay, Ahmedabad and Sholapur.

The director of housing and chief architect to the Ministry of Health of the Government of India has announced that the Indian government has decided to set up a factory in Delhi to turn out 100 pre-fabricated houses per week. Another factory will be established in Bihar to serve the coal mines and steel industry, while a third will be located either in Bombay or Cutch.

Mexico—A low-cost home colony of over 4,000 houses, with schools, stores and markets, is to be established in Mexico City at a tentative cost of $7,150,000. The project is to be financed by the Mexican Association of Insurance Institutions, which comprises 71 companies. The association expects to start construction about February 1.

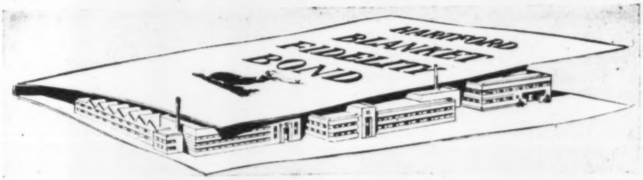
Public Construction

England—The Ministry of Education has announced that the target for educational building in 1949 will be over $200 million. Twice the size of the 1948 program, the new plan is designed to meet urgent developments in technical education and a greatly increased population of school-age children.

New Zealand—The government has announced a plan to develop two ports, Westport and Greymouth, on the west coast of the South Island. The existing natural harbors of the South Island are Marlborough and West Coast, neither of which has commercial utility since the hinterland of each is rugged and thinly populated.

Australia—Naval mines from the last war are to be used to broaden the navigable channel into Port Phillip Bay, the outer harbor of Melbourne. Work on this channel has been under way for the past 60 years, and the rocky passage has been blasted to an official depth of 43 ft. The primary object of the work has now been shifted from deepening to widening.

Holland—Dutch authorities are negotiating with E.C.A. for a large slice of the "counterpart" funds (at present $64,980,000) for the further reclamation of Zuiderzee. In the budget for 1949 the Dutch Finance Minister has curtailed allocations in this respect to continuation of only those reclamation works in progress. If the negotiations succeed, there would be a possibility of beginning reclamation of the large southeast polder.



How can employers guard against large dishonesty losses?

Your judgment in picking people for positions of trust may be of the very best, but it has to be based mainly on past records of character and integrity. It can give you no guarantee against future developments which may induce the most trustworthy employee to succumb to the combination of temptation and opportunity and become an embezzler.

Fidelity Bonds offer business management the only positive means for dealing with this employee dishonesty risk. Such protection in its most modern and highly perfected form can be provided for your organization through Hartford *Blanket* Fidelity Bonds which offer:

1. Repayment of losses of money, merchandise or other company property stolen by employees, whether or not the identity of guilty employees is known.
2. Coverage on *all* personnel—executives, sales staff, office workers and construction crews, watchmen and maintenance men, etc.
3. Hartford *Blanket* Bond rates are at the lowest point in history.
4. Automatic protection against personnel changes, eliminating the danger of uninsured losses.
5. Reduced record-keeping and handling expense, since it is unnecessary to report personnel changes or make premium adjustments during the bond term.
6. Freedom from personnel troubles—because Hartford *Blanket* Bonds cover *all* employees alike, there is no cause for any feeling of discrimination.

These and many other benefits of Hartford *Blanket* Fidelity Bonds are worth your consideration. Your Hartford agent or your own insurance broker will gladly furnish full information on request.

HARTFORD

HARTFORD FIRE INSURANCE COMPANY
HARTFORD ACCIDENT AND INDEMNITY COMPANY
HARTFORD LIVE STOCK INSURANCE COMPANY
Hartford 15, Connecticut

Year in and year out you'll do well with the Hartford

Worthington-Ransome
Blue Brute Distributors

See ad on pages 42, 43 for list of equipment in each line

Worthington-Ransome Distributors

Alaska, Anchorage, Airport Mach. & Storage Co.
Ariz., Phoenix, Lee Redman-Equipment Co.
Ark., Fort Smith, R. A. Young & Son
  Little Rock, R. A. Young & Son

Calif., Richmond, Bay Equip. Co.
Calif., L. A. Golden State Equip. Co.
Calif., Sacramento, Bay Equip. Co.
Colo., Denver, Power Equipment Co.
Conn., Wallingford, Wilhelm-Davies Co., Inc.

Fla., Miami, Allied Equip. Inc.
  Jacksonville, Ogden Equip. Co.
  Orlando, Highway Equipment and Supply Co.
  Panama City, Panama Mach. & Supply Co.
  Tampa, Epperson & Company

Ga., Atlanta, Tractor & Machinery Company

Ida., Boise, Olson Manufacturing Co.
Ill., Chicago, Thomas Hoist Co.
Iowa, Cedar Rapids, McNall Mach. & Supply Corp.

Kansas, Topeka, M. B. Salisbury Co.
Ky., Harlan, Croushorn Equip. & Supply Co.
Ky., Louisville, Williams Tractor Co.

Louisiana, Monroe, Louisiana Machy. Co., Inc.

Maine, South Portland, N. A. Burkitt, Inc.
Mich., Muskegon, Lakeshore Machy. & Supply Co.
Mich., Detroit, W. H. Anderson Co., Inc.
Minn., Minneapolis, Minneapolis Equip. Co.
Mass., Cambridge Field Machy. Co.
Mass., West Springfield, E. F. Edson Co., Inc.
Miss., Jackson, Jackson Road Equip. Co.
Md., Baltimore, Paving Supply & Equip. Co.
Md., Salisbury, Paving Supply & Equip. Co.
Mo., Clayton, The Howard Corporation
Mo., Kansas City, Machinery & Supplies Co., Inc.
Montana, Billings, Seitz Machinery Co., Inc.
  Helena, Caird Eng. Works
Montana, Missoula, Miller Machinery Co.

Nevada, Elko, C. W. Paul Hardware and Machy. Co.
N. J., No. Bergen, American Air Comp. Corp.
N. M., Albuquerque, Industrial Supply Co.
N. M., Roswell, Smith Machy. Co.
N. Y., Buffalo, Murray Equip. Co.
  New York, Hodge & Hammond, Inc.
N. Y., Syracuse, Mid-State Contr. Equip. Co., Inc.
N. Y., Troy, Capitol Equip. Inc.
N. C., Statesville, Interstate Equip. Co.
N. D., Fargo, Smith, Inc.

Ohio, Cincinnati, Carroll-Edwards & Co.
  Dayton, Carroll-Edwards & Co.
  Toledo, The Kilcorse Machy. Co.
Okla., Oklahoma City, Tattan-Douglas Equip. Co.
Oregon, Portland, Anderson Machinery

Pa., Bradford, Bradford Supply Co.
  Wilkes-Barre, Ensminger & Co.
  Mechanicsburg, American Equip. Corp.
  Philadelphia, Metalweld, Inc.

Tenn., Chattanooga, Dempster Bros., Inc.
Tenn., Knoxville, Dempster Bros., Inc.
  Nashville, Dempster Bros., Inc.
Tex., Amarillo, T. W. Carpenter Equip. Co.
  Abilene, W. T. McClure Mach. Co.
  Dallas, Shaw Equip. Co.
  Houston, So. Texas Equip. Co., Inc.
  San Antonio, San Antonio Machy. & Supply Co.

Utah, Salt Lake City, J. K. Wheeler Mach. Co.

Vt., Barre, A. M. Flanders, Inc.
Va., Richmond, Highway Mach. and Supply Co.

W. Va., South Charleston, Allied Equip. Co.
Wash., D. C., Paving Supply & Equip. Co.
Wash., Seattle, Star Machy. Co.
Wash., Spokane, Star Machy. Co.
Wash., Yakima, Star Machy. Co.

Ransome Distributors

O., Cleveland, H. B. Fuller Equip. Co.
Pa., Pittsburgh, Arrow Supply Company

Worthington Distributors

Md., Baltimore, D. C. Elphinstone, Inc.
N. Y., N. Y., Air Compressor Rental & Sales
O., Cleveland, Gibson-Stewart Co.
O., Columbus, Gibson-Stewart Co.
Pa., Pittsburgh, Atlas Equip. Co.
Texas, El Paso, Equip. Supply Co.
Wyoming, Cheyenne, Wilson Equip. & Supply Co.

BUY BLUE BRUTES

Worthington Pump and Machinery Corp.

**Worthington-Ransome Construction
Equipment Division
Holyoke, Massachusetts**

NEW PRODUCTS

Lettering Instrument

Varigraph is small mechanical device for reproducing many sizes of letters from a single template directly in ink or pencil. Letters are reproduced in any desired width combined with any desired height between 0.075 and 0.750 in. Letter width and height are controlled by positioning two knobs. Device rests directly on surface being lettered and slides against any straightedge in being moved from one letter position to the next. In reproducing a letter a finger-operated point follows the letter grooves in the template. A wide range of lettering template styles is available. —VARIGRAPH CO., INC., LINCOLN 3, NEB.

Torque Converter

Torque converter and fluid coupling unit is specifically engineered to the General Motors Series 71 two-cycle diesel engine. Consists of four major elements: pump, turbine and two stators. The unit produces torque multiplication of up to 4 to 1. Easily adaptable to a wide range of construction and road-building machinery. Integrated power plant occupies no more space than the same engine equipped with conventional clutch and power take-off. This accomplishment is made possible by employing the flywheel as a working component of the torque converter assembly. Available in engine ratings from 75 to 300 hp. Outstanding characteristic is ability to pick up load with maximum lifting power and shift automatically from torque converter to fluid coupling in higher speed range.—DETROIT DIESEL ENGINE DIVISION, GENERAL MOTORS CORP., 13,400 W. OUTER DRIVE, DETROIT 28, MICH.

Bituminous Impactor

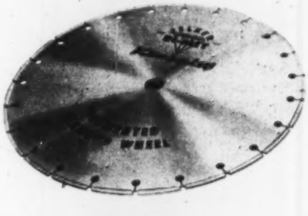
Tamping machine powered by Wisconsin gasoline engine weighing 230 lb., consolidates bituminous paving and patch material. Strikes 1,750-2,000 blows while traveling over a 35 to 42-ft. strip 25 in. wide. Can finish flush to curbs or car tracks. Recommended for widening work, street and road repairs, driveways and parking lots. Travels forward under its own power. Impactor and finishing shoe is heated by engine exhaust. — WAYER IMPACTOR, INC., 12 N. 3RD ST., COLUMBUS 15, OHIO.

Electric Concrete Vibrators

Totally inclosed splash-proof electric motors, watertight control stations and cable connectors, adjustable ball-bearing countershafts, and 360-deg. swivel mountings are features of two concrete vibrators. Shafts from motors to vibrating heads come in sections that can be extended to 35 ft. Flat coils reinforce each end. Model HE has a full-load speed of 6,000 vibrations per min. and a 2½-in. head. Model JE6 has a speed of 7,600 vibrations per min. at full load and a 1½-in. head. — STOW MANUFACTURING CO., BINGHAMTON, N. Y.

Hard-Facing Electrodes

Two new tubular type shielded-arc electrodes designated as Faceweld No. 1 and Faceweld No. 12. No. 1 deposits a chromium carbide type alloy surface and is used for hard facing parts of plain carbon low alloy or manganese steel; it is designed to resist severe abrasion as well as moderate impact. No. 12 is of same type but is designed for use where hard-faced surface must withstand extremely severe abrasion as well as some impact. Both operate on AC or DC, are available in 14-in. lengths in 5/16 and 3/16-in. diameter sizes packed in 10 lb. containers.—LINCOLN ELECTRIC CO., CLEVELAND, OHIO.

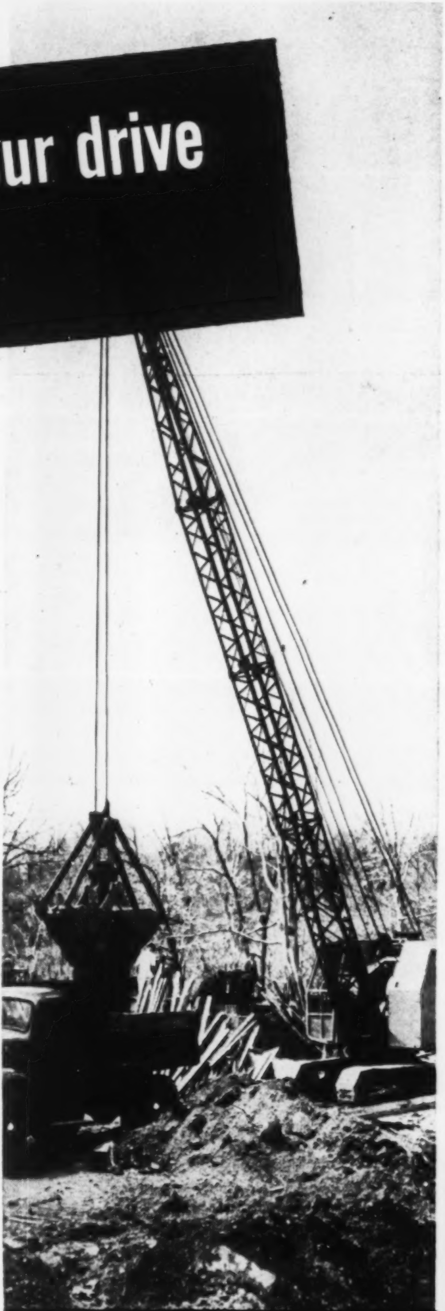


Stone Cutting Wheel

For cutting granite and marble, wheel available in diameters from 14 to 24 in. is of diamond-bearing segmented construction for operation wet. Special rim slots and holes assure greater coolant penetration and long wheel life. Diamond particles are anchored in an improved metal bond that grips them securely. Diamond-bearing segments can be brazed in place if wheel is accidentally damaged. Blade is of stiff, tempered steel.—FELKER MFG. CO., TORRANCE, CALIF.

(Continued on page 34)

Here's help in your drive for lower costs



Preformed "Blue Center" Wire Rope lasts longer...

ROPE THAT STAYS on the job longest saves you wire rope dollars; brings fewer shut-downs; cuts down replacement time. And Roebling Preformed Lang Lay "Blue Center" Steel Wire Rope gives you exactly these money-saving features . . . One big reason for this superiority is "Blue Center" Steel specially developed for wire rope and made only by Roebling. Another big reason is the Roebling Preformed construction with its unique service advantages.

WHY PREFORMED IS ECONOMICAL

Roebling Preformed is easy to handle and install because it is relatively inert and doesn't tend to set or kink. It can be cut without seizing, and fittings are more easily applied. In operation, Preformed gives outstanding life despite severe bending, and particularly where small sheaves and reverse bends occur.

FREE ENGINEERING SERVICE

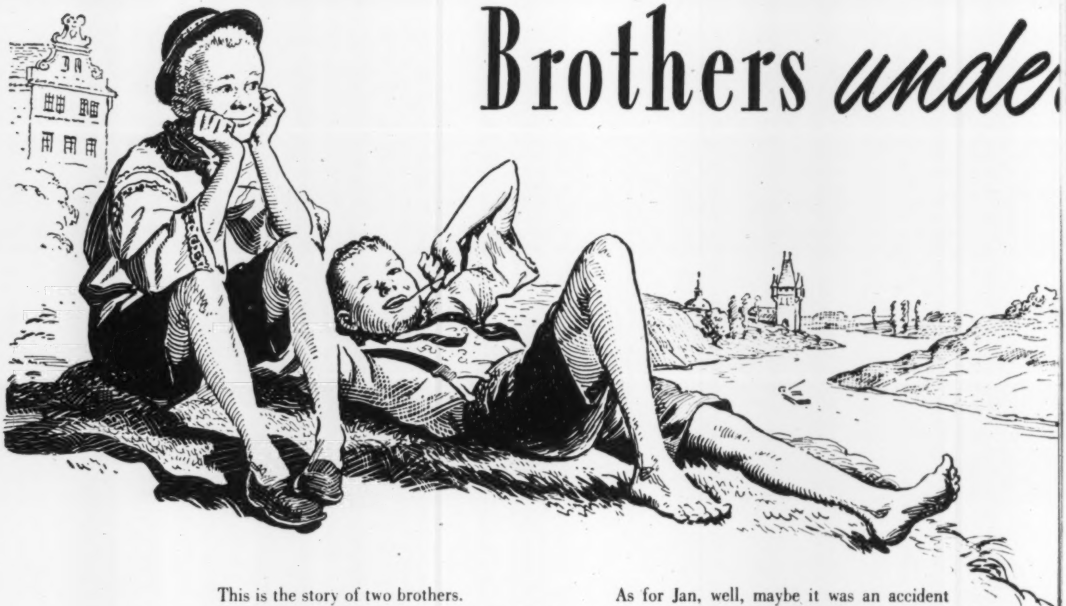
Call on your Roebling Distributor for help in selecting the *right* wire rope for longest service and rock-bottom cost. If you have specially tough problems in wire rope selection, installation or maintenance, your Distributor will be glad to secure the assistance of a Roebling Engineer. John A. Roebling's Sons Company, Trenton 2, New Jersey.

ROEBLING

A CENTURY OF CONFIDENCE

WRITE OR CALL THE ROEBLING FIELD MAN AT YOUR NEAREST ROEBLING OFFICE AND WAREHOUSE

Atlanta, 934 Avon Ave. ★ ***Boston,*** 51 Sleeper St. ★ ***Chicago,*** 5525 W. Roosevelt Rd. ★ ***Cleveland,*** 701 St. Clair Ave., N. E. ★ ***Denver,*** 1635 17th St. ★ ***Houston,*** 6216 Navigation Blvd. ★ ***Los Angeles,*** 216 S. Alameda St. ★ ***New York,*** 19 Rector St. ★ ***Philadelphia,*** 12 S. 12th St. ★ ***Pittsburgh,*** 855 W. North Ave. ★ ***Portland, Ore.,*** 1032 N. W. 14th Ave. ★ ***San Francisco,*** 1740 17th St. ★ ***Seattle,*** 900 First Ave.



Brothers *unde*

This is the story of two brothers.

It has its beginning in a Northern province of Czechoslovakia. Two small boys were sprawled on the banks of the broad Elbe River. This afternoon was not unlike many others. For often they sat by the river and talked, sometimes until sundown.

"I'm going to be rich when I grow up," Karol would vow. "I'll own much land . . . and everyone will point to me and say, 'There is Karol Mahacek. He is the richest man in all Czechoslovakia.' "

Then Jan would watch for that familiar look of determination he had seen so many times on his brother's face. He would see his dark eyes growing larger and brighter, shining already with the happiness the future promised. And he would nod at his brother. Yes, Jan thought, Karol is smart. Yes, Karol will be rich some day.

•

But Jan, too, had dreams . . . dreams he dare not even tell. For Karol would surely think them strange. So he said nothing. He just sat there and looked out into the horizon. Somewhere beyond the Elbe there was an ocean . . . and beyond that? Well, some day he would know.

Old Eduard Mahacek considered his sons—what the future held for them. He even prophesied it many times.

"Jan is a dreamer. He is the one with imagination, but he is not as ambitious as Karol."

Yes, even at an early age, Karol was marked for success.

As for Jan, well, maybe it was an accident that he happened to be on the village dock when a river boat stopped for cargo. Maybe it was fate when on an impulse he took a job on the boat and found his way to the sea, to a different way of life—for Jan came to America.

It wasn't easy for him, at first, this new world. He used to write home about the strange American ways. Yet, there was always something wonderful to tell. He was making progress. He had a good job—good pay.

But Karol's letters were different—filled with uncertainty. He couldn't save to buy the land he promised himself he'd one day own.

•

What does the story of these two brothers mean—and why are their lives so different today? For Jan Mahacek faces the future with confidence—owns his own home—a car—his family is well fed, well clothed.

While Karol is a man without hope—his family ill clothed, ill fed—no home of their own.

The answer is simple, for both are *symbols* of America and Europe. Actually, there is no difference in the people here and there. ***We are all brothers under the skin.*** Like Jan and Karol, we are Czechs, or we're English, French, German, Spanish, Finnish, Norwegian, Polish, Italian . . . just as people are there. We are the same people, with the same blood, the same native ability. But there is *one* essential difference . . .

the Skin

Here in America, we have the opportunity—the privilege to use to the fullest our native ability.

Much has been said about the production genuis of America. And who will deny it? But that power to produce far beyond the record of any nation on earth would never have blossomed into its present greatness if the individual in America had not had the chance to expand his individual talents to produce. Yes, here in America, all have been free to express themselves, to use and to develop talent and ability. This freedom to grow and build for the future isn't something to be considered lightly. It is something that all of us must guard, even with life itself.

Yet, in the abundance that surrounds us, we sometimes forget. We forget that with all this comes an obligation—an obligation to WORK. For, if we do not work to preserve it, we do not deserve it. This great productive power of America grew because of work, became the great thing it is because men bent to the task to accomplish an end.

•

Today, there are forces at work to hold back the high productive ability of America. A false creed is abroad. Some put it this way—"Hold back effort — do only an average job — regulate things." It all has a familiar ring—it is a creed of trading individual opportunity for false promises of future security.

Here at Ceco, we do not accept this creed of leveling of effort, for we believe in full opportunity for the individual. We know what all-out unharnessed production can accomplish. In this past year, for example, we have seen the building industry, unhampered by fewer controls, roll up one of the most impressive records in the history of the industry. Ceco salutes construction men for the job they are doing. Their accomplishments represent the American way of doing things, and we believe in the American way to solve our problems, to provide a more abundant life, to curtail shortages, to drive down prices.

Yes, the way to do this is to work. ALL must work MORE—not be content to be average. Management must work at managing. Labor must work to produce—give a full day's work for a full day's pay. We must constantly produce, create more things instead of less, reduce overall costs per unit—justify high wages. The will to work can drive down costs and prices, drive up production which labor and management both need to stay prosperous.

•

We believe in the right of each man to work for greater opportunity. We believe in the individual's pride in his work and we believe in the importance of the individual's contribution to the task as a whole. We believe in a "two-way traffic" in ideas on how to do the job better. In four years, Ceco has had over 3200 suggestions from shop and office on how to improve product and service.

In all aspects of Ceco's work, we strive for meticulous attention to the little things, because we believe no product is better than the perfection of the smallest detail.

We like to sum it all up in an ideal which best describes the way Ceco and all of its people work in seeking production excellence . . .

"NO TASK IS TOO SMALL,
NONE TOO LARGE,
TO RECEIVE EXACTING CARE.
IN ALL,
ENGINEERING EXCELLENCE
IS THE CECO CREED."

CECO STEEL ®

PARTIAL LIST OF CECO PRODUCTS • STEEL WINDOWS AND DOORS • METAL SCREENS • ALUMINUM STORM WINDOWS • ALUMINUM COMBINATION STORM AND SCREEN UNITS • METAL LATH • STEELFORMS • REINFORCING STEEL • STEEL JOISTS AND ROOF DECK • ATTIC AND ROOF VENTILATORS

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GENERAL OFFICES: 5601 West 26th Street, Chicago 50, Illinois

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THE EDWARD BALF CO.
PAVING CONTRACTORS
Barber-Greene
WHEN IT'S A BIG TOUGH ROAD JOB...

... you need WICO's dependable spark

Whether it's in desert or swamp (and you have to make a surface like a pool table), you haven't time to worry about equipment accessories. On a city job like this speed is always important. So here, too, you need machinery that will always finish the work — and more!

Barber-Greene equipment with a tough engine and a WICO magneto is a combination hard to beat. Whatever you use, make sure before you buy it that the spark will be reliable — by insisting on WICO ignition. And when you replace, ask for WICO. It's the best buy for contractors' equipment.

Trained field engineers and more than two thousand authorized service stations serve WICO users everywhere. Wico Electric Company, West Springfield, Massachusetts.

SINCE 1897
WICO
DEPENDABLE IGNITION

(Continued from page 30)

Motor Trucks Redesigned

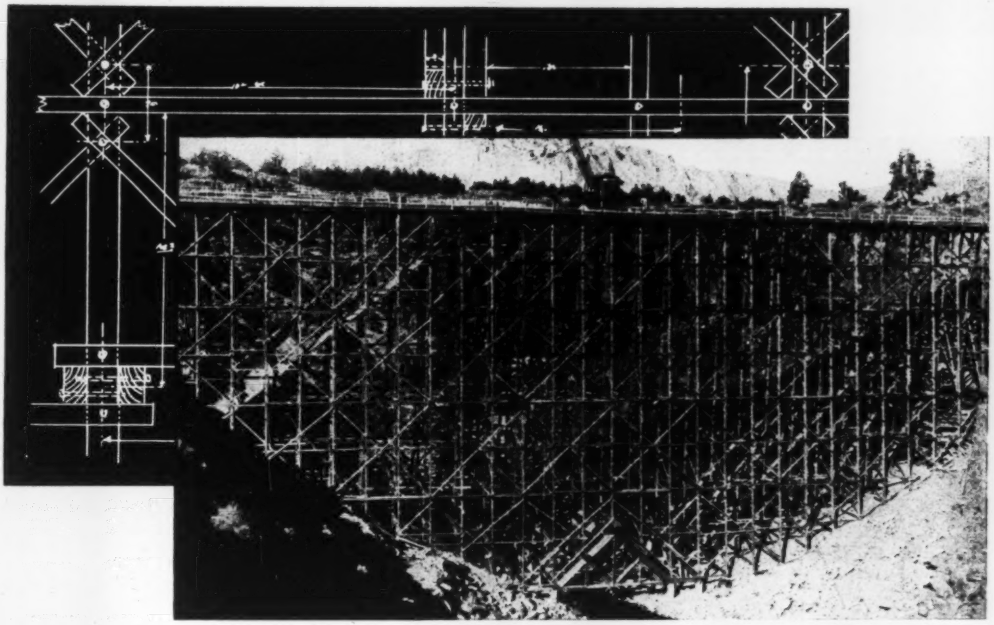
Four-Wheel Drive Model YU re-engineered to produce greater driver comfort, ease of driving, serviceability and adaptability to a wide variety of applications. Rated at 28,000 lb. gross vehicle weight, new model features a 142-hp. motor rated at 2,250 rpm. and is equipped with 5-yd. dump body. Standard wheelbase of 150 in. is listed with options up to 182 in., and body space back of cab from 121 to 190 in. Five-speed transmission contains helical gears in all forward speeds for quiet operation and easy shifting. Cab is of all-steel welded construction. Vacuum-operated center differential lock permits locking of differential, providing positive power to both front and rear axle for climbing steep hills and plowing through mud or sand. New auxiliary transmission, optional on Model YU, provides ten speeds forward and two reverse. Side panels of hood can be lifted for simple servicing. For major motor overhaul hood top may be removed by taking out four bolts, leaving entire motor open to the service man.—FOUR WHEEL DRIVE AUTO CO., CLINTONVILLE, WIS.

Hammer Bit

The Blue Cyclone hammer bit is carbide tipped and has two deep flutes and tapered shank made to fit the Rawl chuck. Designed for accurate drilling in granite, pebble concrete, hard brick, etc., the bit comes in ⅜, 7/16, ½, ⅝, ¾ and 1-in. sizes.—NEW ENGLAND CARBIDE TOOL CO., 60 BROOKLINE ST., CAMBRIDGE 39, MASS.

Scaffolding Connectors

The manufacturer of the Knife Grip products mentioned in our issue of Dec. 2, 1948, is the—NORTH WEST TUBE & METAL CO., 2658 SE TENINO, PORTLAND, ORE.



why to specify PENTACHLOROPHENOL (MONSANTO'S SANTOPHEN 20) for wood preservation

TEN GOOD REASONS

1 Penta is toxic to wood-rotting fungi, termites and wood-boring insects.

2 Penta is stable under normal use conditions.

3 Penta does not leach readily.

4 The toxic principle of Penta preservative has a fixed identity.

5 Penta can be determined analytically either in treating solution or in wood.

6 Penta is easily formulated into an effective preservative solution.

7 Penta makes possible a "clean" treatment.

8 Penta-treated wood does not require re-seasoning after treatment.

9 When properly formulated and applied it does not bleed, thus facilitating handling and storage of the treated wood.

10 Penta is economical to use.

Pentachlorophenol (Monsanto's Santophen 20) offers advantages not found in any other wood preservative. It makes possible a clean, lasting treatment for the protection of industry's huge investments in wood.

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SERVING INDUSTRY . . . WHICH SERVES MANKIND

CONSTRUCTION REPORTS

Bids Asked—Low Bidders—Contracts Awarded—First Section

Compiled by Business News Department—Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ELSIE EAVES, Manager *J. A. MAHONEY, Reports* *E. R. BIGGERSTAFF, M. R. ROESSLER, Statistics*

WATER SUPPLY

BIDS ASKED

January 21

La., Natchitiohes—Frank M. Kees, mayor, Natchitiohes, 44x60 ft. pump plant, with alt. 26x60 ft. plant, concrete fdn., 1,700,000 gal. rein.-con. reservoir, $100,000. Plans deposit $15. Freese & Nichols, 407 Donciger Bldg., Ft. Worth, Tex., engrs. CD 4/1.

LOW BIDDERS

Conn., Groton — Boro, Dpt. Utilities, 359 Thames St., Dec. 22, brick, concrete filtration plant addn., from N. Benvenuti & Sons, 16 Elm St., New London, **$737,000.** CD 11/11—ENR 12/18.

Mass., Fall River—City, Supt. Water Bd., 1620 Bedford St., Dec. 22, pump equip., electric piping, accessories, etc., from James A. Munroe & Sons, 160 N. Washington St., North Attleboro, **$87,475.** CD 12/14—ENR 12/16.

Pa., Phila.—Dpt. P. Wks., City Hall Annex, from M. & J. B. McHugh, 892 N. Markoe St., concrete relining watermains, Contr. 422WWI, **$117,440;** Contr. 424WWI, **$108,865;** Contr. 426WWI, **$91,500*****from John Meehan & Son, 916 W. Dakota St., Contr. 1167, **$78,000*****from Oxford Constr. Co., Commercial Trust Bldg., Contr. WWI421, **$92,748*****from Marion Masse, 3613 N. 8 St., Contr. 425WWI, **$98,030*****from Conduit & Foundation Corp., 770 S. Schuylkill Ave., Contr. 437WWI, **$53,130*****from Harry C. Erb, 1505 Race St., Contr. 1168, **$34,450*****from Roberts Filter Mfg. Co., 6 and Columbia Ave., Darby, Contr. 410WWI, **$33,800.** CD 3/1/46—ENR 3/21/46.

Tex., Corpus Christi—City, 90,000 lin. ft. c.i. water pipe, from American Cast Iron Pipe Co., Citizens State Bank Bldg., Houston, **$140,000.** CD 10/15/47—ENR 10/30/47.

Tex., Dallas—City, L. Goforth, secy., Dec. 28, c.i. watermains, Jefferson, Meredith, Gilpin and Clarendon Sts., from Ben Sira & Co., 6419 Maple St., **$28,000.** CD 7/9—ENR 7/22.

Tex., Fort Worth—City, W. O. Jones, mgr., Dec. 28, North Side Pump Station, Contr. 2, construct pump station, from Paschall-Sanders, 3600 Linden St., **$37,864.** CD 12/13—ENR 12/16.

Va., Lynchburg—City, furnishing, installing 500,000 gal. filter unit, from Roberts Filter Mfg. Co., Darby, Pa., **$33,450.**

CONTRACTS AWARDED

Ia., Chariton—City, City Hall, water sys., improvs., to Dobson Bros. Constr. Co., 809 First National Bank [illegible]g., Lincoln, Neb., **$41,528.** Bids 12/20. CD [illegible]/7—ENR 12/9.

Tex., Dallas—City, L. Goforth, secy., 36 in. c.i. main along west side of Cedar Springs Rd., south of Inwood, force account. **$88,000.** Karl F. Hoefle, c/o owner, engr. CD 7/9—ENR 7/22.

Tex., Houston—City, 34,000 lin. ft. 24 and 36 in. rein.-con. water pipe, to Gifford-Hill American, Inc., c/o City WW Dpt., Houston, **$329,458.** CD 6/30/44—ENR 7/13/44.

SEWERS, WASTE DISPOSAL

BIDS ASKED

January 25

Calif., Camarillo—State Div. Architecture, P. Wks. Bldg., Sacramento, sewage effluent irrigation sys. at Camarillo State Hospital. Anson Boyd, Sacramento, state archt.

February 15

●**Ill., Belleville**—City, Ernst W. Tiemann, City Hall, sewage treatment plant incl. auxiliaries, appurtenances, sanitary sewers, storm water sewer extens., imprvs., etc. $1,250,000. Extended date. Russell & Axon, 408 Olive St., St. Louis 2, Mo., engrs. John C. Thompson, city engr. CD 11/23—ENR 12/2.

LOW BIDDERS

Calif., San Lorenzo—Oro Loma Sanitary Dist., 15099 Hesperian Blvd., Dec. 28, outfall sewers, Schedule C from treatment plant westerly 1,450 ft. toward San Francisco Bay, from Healy Tibbetts Constr. Co., 411 Brannan St., San Francisco, **$273,600.** L. Cedric Macabee, 156 University Ave., Palo Alto, engr.

Tex. and Ark., Texarkana—Cities, cancelled bids to have been opened Jan. 4, sewage disposal plant, outfall line. **$450,000.** CD 12/17—ENR 12/23.

†**Va., Fort Monroe**—U. S. Eng., First and Douglas Sts. N. W., Wash., D. C., Dec. 30, sanitary sewer, from Virginia Engineering Co., P. O. Box 971, Newport News, **$107,320.** CD 12/30—ENR 1/6.

CONTRACTS AWARDED

Kan., Salina—City, City Hall, sewage disposal works equip., to The Dorr Co., 221 N. La Salle St., Chicago, Ill., **$59,009.** CD 7/2/47—ENR 7/24/47.

●**N. Y., Whitestone**—Dpt. P. Wks., Municipal Bldg., New York, Zone 7, Contr. 2, Whitestone Interceptor Collector; Contr. 2-A, electrical work at 154 St. Pumping Station, incl. power lighting and control sys. in connection with Tallmans Island Sewage Treatment Plant, Queens Boro, to Tully & DiNapoli, Inc., 30-11, 12 St., Long Island City, **$1,873,000.** Bids 12/14. CD 11/15—ENR 11/18.

Minn., Shakopee—City, F. A. Dircks, recdr., labor for 38 blocks sewer and waterlines, to Griffith Eng. & Constr. Co., Mora, **$61,008.** D. Childs, city engr.

Tex., New Braunfels—City, sewage treatment plant addns., extens., to Sippel & Adams, P. O. Box 174, **$60,000.** Bids 11/22. CD 11/29—ENR 12/2, under LB.

BRIDGES

LOW BIDDERS

California—State Div. Hys., P. Wks. Bldg., Sacramento, Dec. 29, timber fender for bridge across Carquinez St., Crockett, Contra Costa Co., from Ben C. Gerwick, Inc., 112 Market St., San Francisco. **$58,117.** CD 12/6—ENR 12/9.

Indiana—State Hy. Dpt., Indianapolis, Dec. 30, 1 span 20 ft. rein.-con. arch, untreated timber piling 0.265 mi. approach grading, c. conc. paving over drainage ditch east of Washington, Davies Co., from Ryan & Ryan, Inc., Washington, **$55,122,** est. $67,310***1 span, 40 ft. rein.-con. archt, piling, 0.063 mi. approach grading, c. conc. paving over Lutz Creek S. of Junction with State Rd. 68 Gibson Co., from J. L. Wilson Bloomfield, **$89,614,** est. $108,053*** 2 span, 160 ft. continuous steel beam bridge, no piling, comp. aggregate surf. 0.133 mi. approach grading over Eel River, and under B. & O. Ry., southwest North Salem, Hendricks Co., from George R. Harvey & Son, Danville, **$99,800***** 3 span 200 ft. continuous steel beam bridge, precast conc. and untreated timber piling, incl. compacted aggregate surf. 0.075 mi. approach, grading over Yellow River, south of State Rd. 8, Starke Co., from Rieth Riley Constr. Co., 311 W. Madison St., Goshen, **$103,778,** est. $103,876.

Ia., Des Moines—City City Hall, rejected bids Nov. 16, bridge over Racoon River, L. B. **$296,985.** CD 11/30—ENR 12/2, under LB.

Ia., Des Moines—Des Moines Union Railway Co., C. T. Warren, ch. engr., Des Moines, and City, Zone 9, Dec. 20, underpass at Riverside Dr., from Wickes Eng. & Constr. Co., 1441 Second Ave., **$129,789.** Est. $128,907. CD 12/15.

Maryland — State Rds Comn., Baltimore, Dec. 21, 2,283 ft. filled causeway, 59 ft. wide, part of East approach to Chesapeake Bay Bridge, dredging channel, dredging relocated ferry channel, adjacent to and south of existing ferry channel at Sandy Point Ferry Terminal, Contr. CBB 7-1-87, Queene Anne and Anne Arundel Counties, from William A. Harting, Lansdowne, **$554,250.** CD 12/7—ENR 12/9.

PROJECTS COVERED

Projects—By Size

Construction projects here reported cover the United States and Canada, are of these minimum sizes or larger: water supply, earthwork, waterways $28,000; other public works $50,000; industrial buildings $68,000; other buildings $250,000.

Classes of Construction

(Name in order of Listing)

Water Supply
Sewers, Waste Disposal
Bridges
Streets & Roads
Earthwork, Waterways
Latin America
Public Buildings
Commercial Buildings
Industrial Buildings
Unclassified

Stages Reported

PROPOSED WORK: Including appointment of engineers or architects.

BIDS ASKED (new announcements only). For full calendar, see also preceding issues of ENR.;

LOW BIDDERS: On jobs below $500,000 value all low bidder news will be the final reports published on the projects involved except where award is not made to the low bidder. In this case, a supplementary contract award report will be published.

CONTRACTS AWARDED: Except awards to low bidders previously reported in low bidder stage.

Dates shown are of issue in which last previous report was published.

Symbols and Abbreviations Include:

†	**Federal Government**
●	**Project of $1,000,000 or over.**
ENR	**Engineering News-Record**
CD	**Engineering News-Record Construction Daily**

Mass., Fall River—City, Watuppa Water Bd., c/o City Aud., City Hall, Dec. 22, repairing Wilson Rd. Causeway, across Watuppa Pond, from Montaup Sand & Gravel Constr. Corp., Swansea, **$96,199.**

CONTRACTS AWARDED

Tennessee—State Hy. Dpt., Nashville, underpass and approaches at crossing of Southern Ry. on Iowa Ave. exten. from Walnut to East Sts. 0.289 mi. Shelby Co., to S. & W. Constr. Co., Shrine Bldg., Memphis, **$636,676.** Bids 12/17. CD 12/21—ENR 12/23, under LB.

Ontario—Province of Ontario, Toronto, bridge at Holland Marsh Canal, Barrie, to Runnymede Iron & Steel Co. Ltd., 3362 W. Dundas St., Toronto, **$75,000.**

STREETS AND ROADS

BIDS ASKED

January 17

Pennsylvania — Pennsylvania Turnpike Comn., Harrisburg, grading, drainage, structures 3.9 mi. Turnpike Sec. 240, part of Philadelphia Exten. from point approx. 1,300 ft. west of U. S. Route 322, Elizabeth Twp., east to point approx. 150 ft. west of L.R. 36128, Clay Twp., Lancaster Co. Plans deposit $10. Michael Baker, Jr., Inc., Rochester, engr. CD 6/4—ENR 6/24.

January 21

O., Toledo — Comrs., Lucas Co. Courthouse, grading, draining, resurf. Weckerly Rd. $45,000. CD 11/18/43—ENR 11/25/43.

January 24

Pennsylvania — Pennsylvania Turnpike Comn., Harrisburg, grading, drainage, structures 4.31 mi. Turnpike Sec. 23B, part of Philadelphia Extens. from 0.21 mi. southeast of juncture of TR 341 and Twp. Rd. 566, easterly to point near Dauphin-Lebanon Co. line, Dauphin and Lebanon Counties. Plans deposit $10. Gannett, Fleming, Corddry & Carpenter, Inc., 600 N. 2 St., Harrisburg, consult. engr. R. B. Stone, c/o owner, ch. engr. CD 7/29—ENR 8/29.

LOW BIDDERS

California—State Div. Hys., Sacramento Dec. 30, surf. 8.4 mi. Pigeon Pass Rd., San Bernardino Co., from Bosich Bros. Constr. Co., 600 S. Freemont Ave., Alhambra, **$390,593.** CD 12/6—ENR 12/9.

Colorado—State Hy. Dpt., Denver, Dec. 28, grav. 4.905 mi. State Hy. 15 between Monte Vista and Capulin, Colo. Proj. S 0113 (2), Rio Grande Co., from Floyd Haake, 1201 Sierra Vista St., Santa Fe, N. M., **$137,820.** CD 12/22.

●**Indiana**—State Hy. Dpt., Indianapolis, Dec. 30, c. conc. 3.627 mi. State Rd. 31, by pass north of U. S. Rd. 35, north of Kokomo, Howard Co., from Moellering Constr. Co., 241 Murray St., Fort Wayne, **$385,575** est. $392,333***c. conc. 5.243 mi. State Rd. 64 from west of Arthur to S.W. of Augusta, Pike Co., from Olinger Constr. Co., Huntingburg, **$455,433** est. $490,811***c. conc. 5.394 mi. State Rd. 63, north of Clinton to South of Highland, Vermillion Co., from Berns Constr. Co., 312 E. Wash. St., Indianapolis, **$490,561** est. $498,458***c. conc. 4.853 mi. 2 bridges, State Rd. 15 south of La Fontaine to south of Treaty, Wabash Co., from McMahan Constr. Co., Rochester, **$448,780.** CD 12/9—ENR 12/16.

Maryland—State Rds. Comn., Baltimore, Dec. 28, b. conc., grav. surf. 5.9 mi. State Rt. 3, beginning at intersection, U. S. Rt. 30, St. Rt. 230, Newburg, extend. southeasterly to Tompkinsville, Contr. 264-1-515, Charles Co., from T. Edgie Russell, Frederick **$350,858.** CD 12/23.

Maryland—State Road Comn., Baltimore, grav. 0.567 mi. relocated section St. Rt. 6, approx. 0.23 mi. north of Port Tobacco and extend. southwesterly towards McConchie, Contr. Ch-262-1-515, Charles Co., from F. P. Asher, Jr. & Sons, Inc., West Ext., Annapolis. **$68,797.**

Massachusetts — Commonwealth of Mass., 100 Nashua St., Boston, Dec. 28, hy. wk. Washington St., Quincy, from A. V. Taurasi Co., Inc., 40 Court St., Boston, **$62,629.** CD 12/23.

†**Oregon**—Pub. Roads Admin., Broadway and Oak Bldg., Portland, Dec. 2, surf., oiling, bridge constr. U. S. 395, Oregon Forest Hy. Proj. 35-D3, F2, Grant Co., from E. C. Hall Co., Route 6, Box 630, Portland, **$235,614.** CD 12/15.

Tex., Dallas—City, L. Goforth, secy., Dec. 28, wid'n, asph. Hampton Rd. from Clarendon to W. Davis Sts. from Austin Road Co., 1000 Singleton Blvd., **$129,031.** CD 12/1—ENR 12/23.

Continued on page 38

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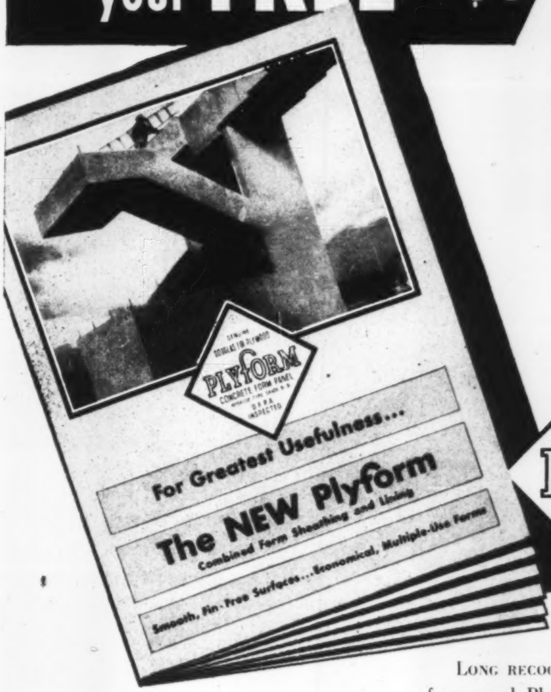

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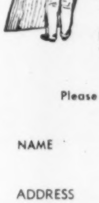

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Continued from page 36

Tex., Houston—Harris Co., Courthouse, c conc. 20 St. between N. Shepherd Dr. and 19 St., from Marvin Brown, 4425 DuPont St., **$50,000.** CD 8/28/47—ENR 9/18/47.

CONTRACTS AWARDED

Maryland—State Hy. Comn., Baltimore, c. conc. 1.535 mi. dual highway from Hammonds Ferry Rd. southerly to Winterson Rd., Contr. AA-368-3-358, Anne Arundel Co., to Rea Constr. Co., P. O. Box 2015, Charlotte, N. C., **$870,487.** Bids 10/19, awarded 12/23. CD 10/26—ENR 10/28, under LB.

Pennsylvania—State Hy. Dpt., Harrisburg, bit. 5.43 mi. and I-beam bridge over Little Conewago Creek, T. R. 74, York Co., to Hempt Bros., Camp Hill, **$628,050.** Bids 12/17. CD 12/27—ENR 12/30, under LB.

●**Tennessee**—State Hy. Dpt., Nashville, c. conc. 5.671 mi. Marion Co., to Wright Contg. Co., 504 25 Ave., Columbus, Ga., **$516,506*****c. conc.-b. conc. 2.091 mi. Hamilton Co., to Foster & Creighton Co., American National Bank Bldg., Nashville, **$654,672***** wid'n. resur. bit. 30.617 mi. Hamblen, Hawkins and Greene Counties, and wid'n. resur. 34.498 mi. Rhea and Roane Counties, to Wesco Paving Co., Volunteer Bldg., Chattanooga, **$784,502** and **$723,800** respectively*** b. conc. 3.717 mi. St. Hy. 9, Anderson Co., to R. B. Tyler Co., 1446 Levering St., Louisville, Ky., **$657,136.** Grand total $3,336,616. Bids 12/17. CD 12/21—ENR 12/23, under LB.

Tex., Dallas—City, c/o Park Bd., asph. Samuel Park Rds., force account. **$50,000.** CD 12/1—ENR 12/23.

Tex., Waco—McLennan Co., c/o Judge, Courthouse, surf. McGregor west to Bosque Co. line, **$60,000;** Elm Mott-McLennan and Bosque Co. lines, **$65,000,** force account. CD 8/28/47—ENR 9/18/47.

Tex., Weimar—Colorado Co., c/o Judge, Courthouse, grav., Precinct 1, **$80,000;** Precinct 2, **$90,000,** force account. CD 7/17/47—ENR 8/7/47.

EARTHWORK, WATERWAYS

BIDS ASKED

After January 7

†**Arizona-Nevada**—Bureau Reclamation, Dpt. Interior, Bldg. 1-A, Denver Federal Center, Denver, Colo., Blythe Substation 15,000 kva. capacity from 161 kv to 34.5 kv, Davis Dam Project, Arizona-Nevada, about 12 mi. north of Blythe, Calif.

After January 14

†**Montana** — Bureau Reclamation, Dpt. Interior, Billings, pump. plant, substation structure, 8 mi. canal and laterals, Savage Unit (Yellowstone Pumping) near Savage, Missouri River Basin Proj. CD 7/10/47—ENR 7/17/47.

January 18

†**Arkansas**—U. S. Eng., foot of Prytania St., New Orleans 9, La., pile dike, Red River, near Garland City, Serial No. Eng.-16-047-49-202.

†**Illinois**—U. S. Eng., Clock Tower Bldg., Rock Island, Bay Creek Channel straightening Sny Island Levee Drainage Dist., Calhoun Co., Serial No. Eng.-11-117-49-50.

LOW BIDDERS

●†**California**—Bureau Reclamation, Dpt. Interior, Redding, Dec. 29, earthwork, structures, track, telephone line for Shasta Dam branch line railroad relocation, Middle Creek to Matheson and earthwork, structures surfacing for Shasta County road relocations, Keswick Reservoir, Central Valley Proj., Spec. 2477, from Morrison-Knudsen Co., Inc., 411 W. 5 Street, Los Angeles, **$1,778,391.** CD 11/22—ENR 11/25.

●**Fla., Miami** — Bd. Comrs. Dade Co., Court House, Bldg., rejected bids Sept. 28, Contr. A, Miami River Locks and Dam. LB., **$1,173,071.** CD 10/5—ENR 19/7.

†**Ill., Galena**—U. S. Eng., Clock Tower Bldg., Rock Island, Dec. 21, flood control proj., Galena River, from Massman Robinson Co., 5540 W. Park St., St. Louis, Mo., **$311,634.** CD 12/6—ENR 12/9, under Sewers, etc.

Mass., Falmouth—Dpt. P. Wks., Commonwealth of Mass., 100 Nashua St., Boston, Dec. 23, shore protection, Falmouth Heights, from F. U. Lawrence, Inc., Gifford St., Falmouth, **$34,225.**

●**Pennsylvania**—Dpt. Forests & Waters, 463 Education Bldg., Harrisburg, rejected bids Dec. 20 flood control and recreational dam on Little Pine Creek, 2 mi. upstream from its junction with Pine Creek, 25 mi. north of Williamsport, incl. flood control basin, Lycoming Co. LB **$2,067,314.** Est. $2,500,000. Will re-advertise. CD 12/23—ENR 12/30, under LB.

†**Pa., Wilkes-Barre**—U. S. Eng., Standard Oil Bldg., Baltimore 2, Md., Dec. 21, river bank stabilization, Susquehanna River, Eng.-18-020-49-46, from Thomas E. Dickson, Buffalo, N. Y., **$75,000.** Est. $154,760. CD 12/17.

Tex., Houston—Port Comn., Harris Co., c/o Wharf 13, L. Peavy, Houston, drainage, from Campbell Constr. Co., 1st Natl. Bank Bldg., Shreveport, La., **$56,537.** CD 7/6/44—ENR 7/27/44.

†**Alaska, Ketchikan**—U. S. Eng., 4735 E. Marginal Way, Seattle 4, Wash., received no bids Dec. 29, maintenance dredging Thomas Basin, Spec. 45-108-49-86. CD 12/8—ENR 12/16.

CONTRACTS AWARDED

●**La., Krotz Springs**—New Orleans, Texas & Mexico Ry. Co., C. S. Kirkpatrick, ch. engr., 204 Union Station, Houston, Tex., Sects. 2 and 3, embankments for floodways, to R. B. Potashnick, Cape Girardeau, Mo., **$1,053,509,** Sect. 1, floodway embankments, etc., to Cleal T. Watts, Rochdale, Miss., **$250,970.** Bids 12/15. CD 12/27—ENR 12/30, under LB.

Tex., Beaumont—Jefferson County Drainage Dists. 3 and 6, Beaumont, clearing, grubbing, grading south fork Taylors Bayou from junction 2 branches up to mouth of Mayhaw Bayou, force account. **$30,000.** CD 12/28—ENR 1/6, under LB.

Ont., Collingwood—Dpt. P. Wks., Ottawa, harbour reconstruction and imprvs., reconstruction of terminal wharf, Job 2, to R. A. Blyth Constr. Co., 7 St. Andrews Gardens, Toronto. Approx. **$150,689.** CD 7/1—ENR 7/22.

AIRPORTS AND AIRBASES

BIDS ASKED

February 5

†**Alaska** — CONCRETE, etc. — U. S. Eng., (APO 942 c/o P. M., Seattle, Wash.) Anchorage, furnishing, concrete, grout, sand, aggregate and other allied materials to government contractors at Fort Richardson, near Anchorage; Ladd Air Force Base near Fairbanks and Eielson Air Force Base, Mile 26. Plans deposit $50. CD 10/26—ENR 11/11.

LOW BIDDERS

●**N. Y., Idlewild**—AIRPORT—Port of New York Auth., 111 Eighth Ave., New York, Zone 11, Dec. 30, Hangars 3 and 4 at airport, from Stock Constr. Corp., Grand Central Terminal Bldg., New York, Zone 17, **$4,212,865.** CD 12/14—ENR 12/16.

LATIN AMERICA

Mexico, Mexico City—Salvador Lutteroth, Pte Alvarado, 71, Mexico, D. F., design and construction indoor sports stadium, to Clark y Mansilla, Pte. Alvarado, 71, Mexico, D. F. **$1,500,000.** Awarded 12/29. Ing. Luis Negrete, Revillagiedo, 2, Mexico, D. F., archt.

PUBLIC BUILDINGS

BIDS ASKED

Early in 1949

†**Kan., Fort Leavenworth** — U. S. Eng., 1709 Jackson St., Omaha, Neb., printing plant, $400,000. (**Correction**—Address of owner.) CD 12/1—ENR 1/6.

January 18

D. C., Wash.—District Comrs., laboratory at Gallinger Municipal Hospital. Plans deposit $20. CD 3/29/45—ENR 5/7/45.

†**Ga., Augusta**—U. S. Eng., Post Office Bldg., Savannah, modifications and addns. to obstetrics and emergency clinic, Oliver General Hospital, Serial No. Eng-09-133-49-142.

Mass., Billerica—Town, Supt. Schools, 170x184 ft. school addn., incl. 12 rooms, gymnasium, library etc. $500,000. Perley F. Gilbert, Hunt, Forbes & Mitchell, 53 Central St., Lowell, archts. CD 10/14—ENR 10/28.

Minn., Minneapolis—University of Minnesota, R. S. Callaway, purch. agt., chemical engineering bldg. Plans deposit $15. Extended date. Magney, Tusler & Setter, 202 Foshay Tower, archts. CD 12/15—ENR 12/23.

Pa., Lancaster—Dpt. Property & Supplies, 18 and Herr Sts., Harrisburg, Thaddeus Stevens Industrial School. Over $250,000.

January 19

La., Transylvania — East Caroll Parish School Bd., H. H. Moorman, supt., Lake Providence, Transylvania School. H. H. Land, Ouachita Natl. Bank Bldg., Monroe, archt.

N. Y., Irondequoit — Bd. Educ., Union School Dist. 3, Junior and Senior High School, Cooper Rd. $990,000. Carl C. Ade, 31 Gibbs St., Rochester, archt. CD 10/12/44 — ENR 11/2/44.

January 20

†**Wyoming**—Bureau Reclamation, Dpt. Interior, New Customhouse, Denver, Colo., steel structures for Hanna Sub-station, Kendrick Proj., Spec. R7-41 (Region 7).

About January 21

Minn., St. Peter—State Dpt. Admin., P. T. Peterson, dir. Purchases, 19 State Capitol, St. Paul, service bldg. at State Hospital, $300,000. Pass & Rockey, Mankato, archts. CD 10/25—ENR 10/28.

January 21

●**Ill., Elmhurst**—School Dist. 46, Elmhurst, 2 story brick, rein.con. stone high school, $1,500,000. Plans deposit $50. Nairne W. Fisher, 110 S. Dearborn St., Chicago, archt. CD 1/30/46—ENR 5/16/46.

Ia., Oakdale—State Bd. Educ., 1007 Des Moines St. Des Moines, state sanitarium addn. $300,000. Morgan, Gelatt & Assoc., Burlington, archts.

O., Columbus—Bd. Educ., Wm. V. Drake, clk.-treas., 2 story, brick Fairmoor School, $250,000. CD 11/12/47—ENR 11/27/47.

Va., Alexandria—City School Bd., Alexandria, Madison Street High School and George Mason School addn. Approx. $500,000. Dixon & Norman, 1103 E. Main St., Richmond, archts.

January 24

N. Y., Uniondale—Bd. Fire Comrs., Uniondale, firehouse. $135,000. Plans deposit $25. W. T. Schaardt, Meadowbrook Bldg., Sunrise Hy., Bellmore, archt.

January 25

Ia., Denison—City, City Hall, one 3,000 kw. turbo-generator with auxiliaries and one 5,000 sq. ft. surface condenser with auxiliaries, incl. service of an erecting engineer; power plant auxiliary equip. incl. heat exchanger, deaerating heater, boiler feed pump, combustion control and instruments, air compressor, for municipal electric light and power plant. Lutz & May, 819 Finance Bldg., Kansas City 6, Mo., consult. engrs. CD 6/24—ENR 7/8.

†**Kan., Fort Leavenworth**—U. S. Eng., 1709 Jackson St., Omaha, Neb., electrical substation and feeder lines, Fort Leavenworth, Serial No. Eng. 25-066-49-155. CD 12/10—ENR 12/16.

Tex., Del Rio—Del Rio Independent School Dist., Del Rio, 1 story, brick, concrete, steel trusses athletic bldg. and bleachers. $90,000. J. W. Beretta Engineers, Inc., 902 Travis Bldg., San Antonio, engr.

January 26

†**Okla., McAlester**—Pub. Wks. Office, Naval Ammunition Depot, two 1 story detached masonry houses, Spec. 18308. Plans deposit $10.

January 27

Wis., Kenosha—Bd. Educ., Kenosha, 2 story bsmnt. school. Plans deposit $30. Childs & Smith, 20 N. Wacker Dr., Chicago, Ill., archts. CD 10/29/47—ENR 11/13/47.

January 28

N. Y., New York—Bd. Transportation, 250 Hudson St., Zone 13, general building constr. work for 59 Street Power Plant, New York City Transit Sys.

W. Va., Wheeling—City, City Bldg., 3 story, brick, tile Negro Recreation Center, Charles St. $250,000. Frederic Faris, 1117 Chapline St., archt.

About January 30

†**N. C., Fort Bragg**—U. S. Eng., 308 Customhouse, Wilmington, family quarters. Extended date. CD 11/29—ENR 12/9.

About February 1

Minn., Moose Lake—State Dpt. Admin. P. T. Peterson, dir. Purchases, 19 State Capitol, St. Paul, geriatric bldg. at State Hospital, $550,000. Toltz, King & Day, 1509 Pioneer Bldg., St. Paul, archts. CD 11/14/46—ENR 11/28/46.

About February 2

Minn., Fergus Falls—State Dpt. Admin. P. T. Peterson, dir. Purchases, 19 State Capitol, St. Paul, power plant alterations at State Hospital. $100,000. Toltz, King & Day, 1509 Pioneer Bldg., St. Paul, engrs.

About February 8

Minn., St. Peter—State Dpt. admin., P. T. Peterson, dir. Purchases, 19 State Capitol, St. Paul, second geriatric bldg. at State Hospital. $550,000. Toltz, King & Day, 1509 Pioneer Bldg., St. Paul, archts. CD 11/14/46—ENR 11/28/46.

About February 9

Minn., Moose Lake—State Dpt. Admin., P. T. Peterson, dir. Purchases, 19 State Capitol, St. Paul, power plant alterations at State Hospital. $100,000. Toltz, King & Day, 1509 Pioneer Bldg., St. Paul, engrs.

About February 17

Minn., Rochester—State Dpt. Admin., P. T. Peterson, dir. Purchases, 19 State Capitol, St. Paul, (second) geriatric bldg. at State Hospital. $550,000. Toltz, King & Day, 1509 Pioneer Bldg., St. Paul, archts. CD 11/14/46 ENR 11/28/46.

LOW BIDDERS

Ala., Tuscaloosa—University of Alabama, Tuscaloosa, Dec. 29, girl's residence hall, from Batson & Cook Co., West Point, Ga., **$309,288.** CD 12/14—ENR 12/16.

Conn., New Haven — State, G. Albert Hill, hy. comr., State Office Bldg., Hartford, Dec. 29, 2 story, 40x140 ft., wings 40x185 ft., 45x170 ft., 1 story, 45x115 ft., brick, steel garage-maintenance bldg., Pond Lilly Ave., from E & F Construction Co., 94 Wells St., Bridgeport, **$424,000.** Alternate **$412,285** concrete blocks, brick facing; site preparations, from C. L. Hale Constr. Co., 869 Main St., Manchester, **$73,000.** CD 12/9—ENR 12/16.

Ky., Scottsville—Allen Co., rejected bids Dec. 7, hospital. L. B. **$285,000.** CD 11/5—ENR 11/11.

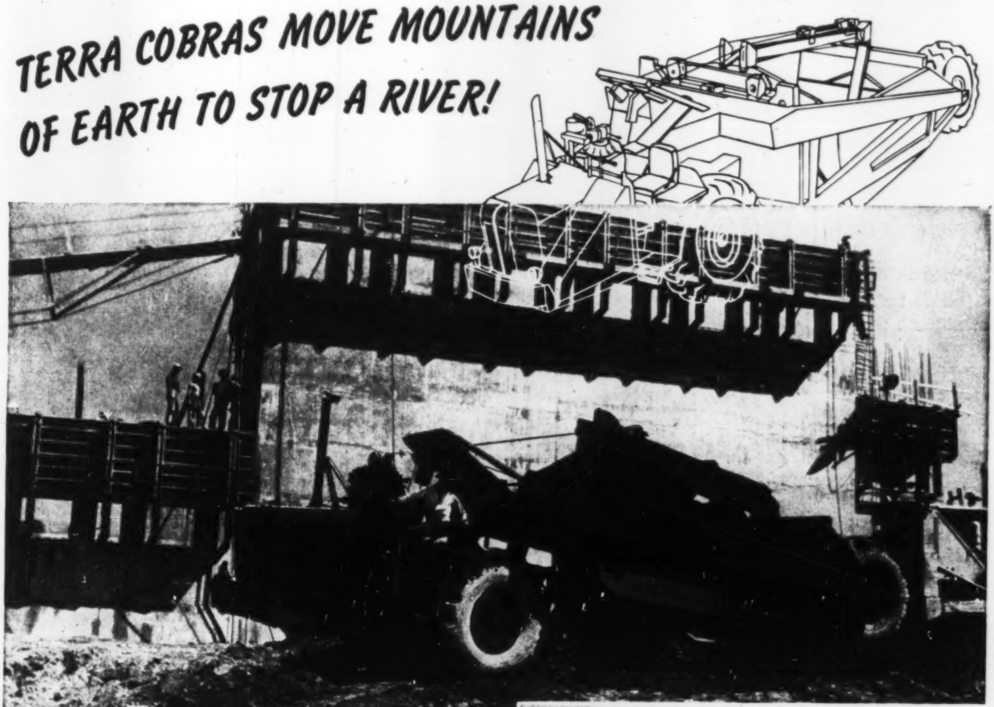
Md., Baltimore—Morgan State College, Bd. Trustees, Hillen Rd. and Arlington Ave., Dec. 23, 2 story, stone academic bldg., from John K. Ruff, Inc., 100 W. 22 St., **$593,593.** CD 12/16.

Mass., Agawam—Town, Bd. Educ., Agawam, Dec. 15, Feeding Hills School, from Capuano Constr. Co., 25 Harrison Ave., Springfield, **$310,238.** Paul B. Johnson, 66 Vernon St., Springfield, archt.

Mass., Amherst—Commonwealth of Mass., University of Mass., R. D. Hawley, treas., Amherst, Dec. 22, Pe-2 boiler house, from Daniel O'Connells Sons, Inc., 480 Hampshire St., Holyoke (A) **$854,199.** (B) **$674,046.**

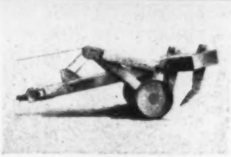
Continued on page 40

TERRA COBRAS MOVE MOUNTAINS OF EARTH TO STOP A RIVER!

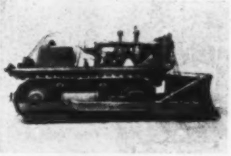


Above: One of a fleet of Wooldridge Terra Cobras back-filling at the Angostura Dam on the Cheyenne River.

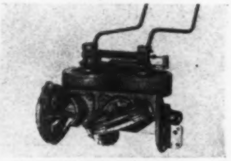
SCRAPERS: Boiling Bowl and Terra Clipper Scrapers from 7.5 to 27.5 cu. yd. heaped capacities.



RIPPERS: Three models; for extra heavy, standard, or light duty.



BULLDOZERS and Trail-builders for all standard makes of tractors.



POWER CONTROL UNITS: Two-drum winches for use with all standard tractors.

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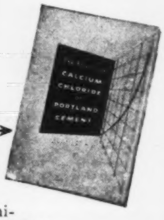

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Continued from page 38

Mass., Boston—City, Dpt. P. Welfare, 43 Hawkins St., Dec. 22, welfare bldg. addn., 43 Fayette St., from S. Volpe & Co., Inc., 150 Congress St., **$243,398.** CD 10/1—ENR 10/28.

Mass., Boston—City Housing Authority, 10 Post Office Sq., rejected bids Dec. 8, 43 unit veterans housing, Columbia Rd. and P. St., South Boston. L. B. **$502,075.** Will readvertise. Saul E. Moffie, 1318 Beacon St., Brookline, archt. CD 12/15—ENR 12/23, under LB.

Mass., Dorchester—City, Trustees, George Robert White Fund, City Hall, Boston, Dec. 28, health unit, Franklin Park, Harvard St. and Blue Hill Ave., from J. A. Singarella Co., 15 Bay St., Dorchester, **$293,000.** CD 12/15—ENR 12/23.

●†N. M., Albuquerque — U. S. Eng., P. O. Box 1538, Dec. 21, Barracks, Group III, Sandia Base, Eng-29-005-49-29 from Robert E. McKee, 1918 Texas St., El Paso, Tex., Lot 1 and Lots 2-7 inclusive **$1,787,686** est. $1,949,557 and Lot 1A and Lots 2-7 inclusive **$1,783,686** est. $1,944,277. CD 11/16—ENR 11/18.

●O., Columbus—Dpt. P. Wks., George B. Sowers, Dir., Columbus, Dec. 9, general contract 8 story bookstack tower and addnl. space for Ohio State University Library, from Mellon-Stuart, 210 E. Park Way, Pittsburgh, Pa., **$1,585,724*****heating, from Sauer Co., Inc., 368 N. Washington Ave., **$257,043*****bookstacks, from Virginia Metal Products Corp., Orange, Va., **$259,606.** CD 11/5—ENR 11/11.

●Ore., Portland — Multnomah Co., Courthouse, Dec. 30, juvenile home, from L. H. Hoffman, 715 S.W. Columbia St., **$1,073,573.** CD 12/9—ENR 12/16.

Pa., Spring City—Dpt. Property & Supplies, 18 and Herr Sts., Harrisburg, Dec. 29, general contract boiler plant at Pennhurst State School from Paul A. Martin, Donegal Springs Rd., Mt. Joy, **$277,232;** mechanical from Corbit's, Inc., 225 S. Front St., Reading, **$361,983.** CD 12/7—ENR 12/9.

†Texas—Lower Colorado River Auth., American Statesman Bldg., Austin, Dec. 28, power house extens. at Buchanan Dam, near Burnet, from Cage, Anglin & Field, Dallas Hy., Austin, **$157,201.** Est. $80,000. CD 12/7—ENR 12/9.

Utah, Salt Lake City—Granite School Dist. 3212 S. State St., Dec. 14, general contract Granite Junior High School, from Paul Constr. Co., 1425 Jefferson St., **$866,777.** CD 12/15—ENR 1/7.

Utah, South Ogden—Weber Co. School Dist., Ogden, Dec. 16, general contract brick, steel, rein.-con. Junior High School, from George A. Whitmeyer, P. O. Box 857, Ogden, **$582,900.** CD 8/29/46—ENR 9/19/46.

CONTRACTS AWARDED

Calif., Los Angeles—Bd. Regents, University of California, 405 Hilgard St., 1 story, frame, stucco, 16,000 sq. ft. school, on campus of University of California, to George O. Chapman, 14140 Van Owen St., Van Nuys, **$312,129.** Bids 12/7, awarded 12/17.

Calif., Los Angeles—City, Bd. P. Wks., 153 City Hall, shop and steam cleaning plant, to R. J. Daum Constr. Co., 6803 West Blvd., Inglewood, **$634,566.** Est. $520,000. Bids 12/22, awarded 12/29. CD 12/28—ENR 1/6, under LB.

†Ind., Fort Wayne — U. S. Eng., 500 Griswold St., Detroit, Mich., 2 story managers residence, 2 duplex residences, 1 story nurses quarters and attendants quarters, Fort Wayne Veterans Administration Hospital, to W. A. Sheets & Sons, Inc., 1057 Osage St., **$277,000.** Bids about 11/15. CD 11/4.

Mass., Boston—City Housing Authority, 10 Post Office Square, Boston, 66 unit veterans housing, Farragut Rd., South Boston, to M. S. Kelliher Co., 294 Washington St., Boston, **$765,395.** Bids 12/15, awarded 12/27. CD 12/1—ENR 12/9.

Mich., Royal Oak—City, City Hall, 1 story, brick, cinder block, Whittier School, to William Esslinger Constr. Co., 159 E. Columbia St., Detroit, **$296,000.** Bids 12/22, awarded 12/27. CD 12/14—ENR 12/16.

Minn., Rochester—Bd. Educ., general contract 2 schools, to Stocke & Olson, 438 Baker Bldg., Minneapolis, **$792,000.** CD 1/3—ENR 1/6, under LB.

Mont., Warm Springs—State Bd. Examiners, Helena, general contract 1 story, rein.-con. womens dormitory, Montana State Hospital for Insane, to Askevold Constr. Co., Missoula, **$441,665.** Bids 12/28.

Tex., Galveston—University of Texas Medical School, Galveston, 7 rein.-con. transformer vaults, to J. Zempter Constr. Co., 2115 Church St., **$50,000.**

Tex., Monahans — Monahans-Wickett Independent School Dist., Monahans, high school, to Rose Constr. Co., Abilene, **$706,000.** Bids 12/22. CD 12/29, under LB.

Utah, Ogden—City, c/o Mrs. C. M. Barrett, recdr., central fire station, to Frost & Jolly, Ogden, **$278,358.** Paul S. Hodgson, 829 Eccles Bldg., archt. CD 11/1/45—ENR 12/13/45.

Va., Alexandria — Bd. Educ., Alexandria, Maury School and MacArthur School addns., to Eugene Simpson & Bros., Alexandria, **$419,600.** Robert A. Willgoos, 123 N. Fairfax St., archt.

Va., Nottoway—Nottoway Co., Negro High School, to Mottley Constr. Co., Farmville, **$431,900.** C. H. Hinnant, 403 Lynch Bldg., Lynchburg, archt. CD 3/10/47—ENR 3/13/47.

COMMERCIAL BUILDINGS

BIDS ASKED

January 13

Mich., Detroit—Jewish Hospital Assn., c/o architect, 4 story, bsmnt., concrete, brick, stone hospital, Albert Kahn, Assoc. Architects & Engineers, Inc., 345 New Center Bldg., archt. and engr. CD 5/17—ENR 3/25.

January 25

Fla., White Springs—Stephen Foster Memorial Comn., c/o Mackey W. White, archt., Rt. 1, Box 558, Annandale, Va., museum. Plans deposit $25. CD 12/9—ENR 12/16.

Before February 1

O., Toledo—Robinwood Hospital, 2517 Robinwood St., G. L. Losh, mgr., remodeling, enlarging Robinwood Hospital. CD 1/28/48—ENR 2/19/48.

About March 1

Fla., Miami—S. E. Schwartz, c/o Milton Sherman, archt., 141 N. E. 3 Ave., hotel. Over $750,000.

March 25

N. Y., Tarrytown—Marymount College, Marymount Ave., auditorium. Eggers & Higgins, 542 Fifth Ave., New York, Zone 18, archts. Extended date. CD 12/29—ENR 1/6.

Bids Asked

Tex., Bellaire—Homecrafters, Inc., c/o Edward M. Hovas, 324 Hughes St. or 714 Milam St., Houston, 30 dwellings, Bel Haven addn. $550,000. Westemeyer & Gaffney, 2351 Claremont Lane, Houston, archts. CD 12/23—ENR 12/30.

SOON LETS CONTRACT

Ala., Alabama City—Crescent Amusement Co., 6 Ave., Nashville, Tenn., soon lets contract theater, $250,000. Marr & Holman, Stahlman Bldg., Nashville, Tenn., archts.

Calif., San Francisco—California Academy of Sciences, Golden Gate Park, soon lets contract 1 story, steel frame, rein-con. planetarium, $750,000. Weihe, Frick & Kruse, 251 Kearny St., archts. Hall & Pregnoff, 251 Kearny St., engrs. CD 1/22/47—ENR 1/30/47.

Kan., Fredonia—Sisters of Mercy, Fort Scott, soon lets contract, St. Margaret's Mercy Hospital, $400,000. Lorentz Schmidt, McVay & Peddie, 1832 E. 2 St., Wichita, archts.

Mich., Detroit—International Brotherhood of Maintenance of Way Employees, 61 Putnam St., soon lets contract 3 story, bsmnt, 100 x 114 ft., concrete, steel, limestone office, Albert Kahn Assoc. Architects & Engineers, Inc., 345 New Center Bldg., archt. and engr.

Tex., Beaumont—J. Weingartens, Inc., 808 Prairie St., Houston, soon lets contract store. $250,000. Finger & Rustay, National Standard Bldg., Houston, engrs. CD 12/28—ENR 1/6.

Tex., Dallas—Southwestern Bell Telephone Co., Akard and Woods Sts., soon lets contract masonry, steel, concrete telephone bldg. $250,000. CD 12/21—ENR 12/23.

Tex., Port Arthur—J. Weingartens, Inc., 808 Prairie St., Houston, soon lets contract store. $250,000. Finger & Rustay, National Standard Bldg., Houston, archts. CD 12/28—ENR 1/6, under LB.

LOW BIDDERS

Colo., Montrose—Montrose County Hospital Com., Walter Lacher, chn. Bldg. Com., 1 story, bsmnt., brick, concrete general hospital, from R. E. Wear & Son, Montrose, **$362,643.** Est. $300,000. CD 11/29—ENR 12/2.

Ore., Salem—First Christian Church, High and Center Sts., Dec. 15, 118x150 ft. masonry church, Marion and Cottage Sts., from R. M. Robson, 2814 N. E. Skidmore St., Portland, **$388,495.** CD 11/24—ENR 12/2.

CONTRACTS AWARDED

Calif., Downey—Garrick & Custer, 2048 W. Florence St., 45 frame, stucco dwellings. Owner builds. **$360,000.** Southwest Drafting Service, 2724 W. Florence St., archts.

Calif., Los Angeles—Robertson Co., 4015 W. Jefferson Blvd., 100 frame, stucco dwellings. Owner builds, **$750,000.** Max Maltzman, 4015 W. Jefferson Blvd., archt.

Fla., Miami—F-Thirty, Inc., c/o contractor, 66 homes, to Albert Constr. Co., 3140 N. Miami Ave. Est. over **$400,000.**

Fla., St. Petersburg—Davis Constr. Co., c/o George Davis, Sherman Hotel, 20 homes, force account. **$300,000.**

●Ga., Hapeville—Owner, c/o contractor, 942 housing units, to Algernon Blair, First National Bank Bldg., Montgomery, Ala., Est. over **$1,000,000.**

Ill., Chicago—Appleton Electric Co., 1725 Wellington St., general contract 2 story, office alterations, to Carl E. Erickson Co., 4657 N. Ravenswood St. Est. **$350,000.** Robert Ostergren, 5153 N. Clark St., archt.

Ill., Park Forest—American Community Builders, 105 W. Monroe St., Chicago, 1 story store, 2 story management bldg. Owner builds. **$250,000.** Loebl, Schlossman & Bennett, 333 N. Michigan St., archts.

Continued on page 45

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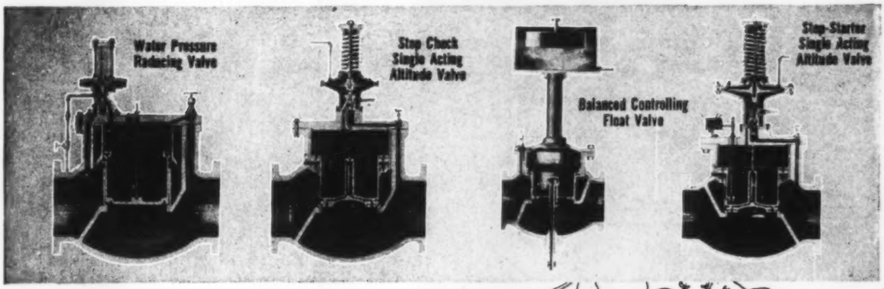
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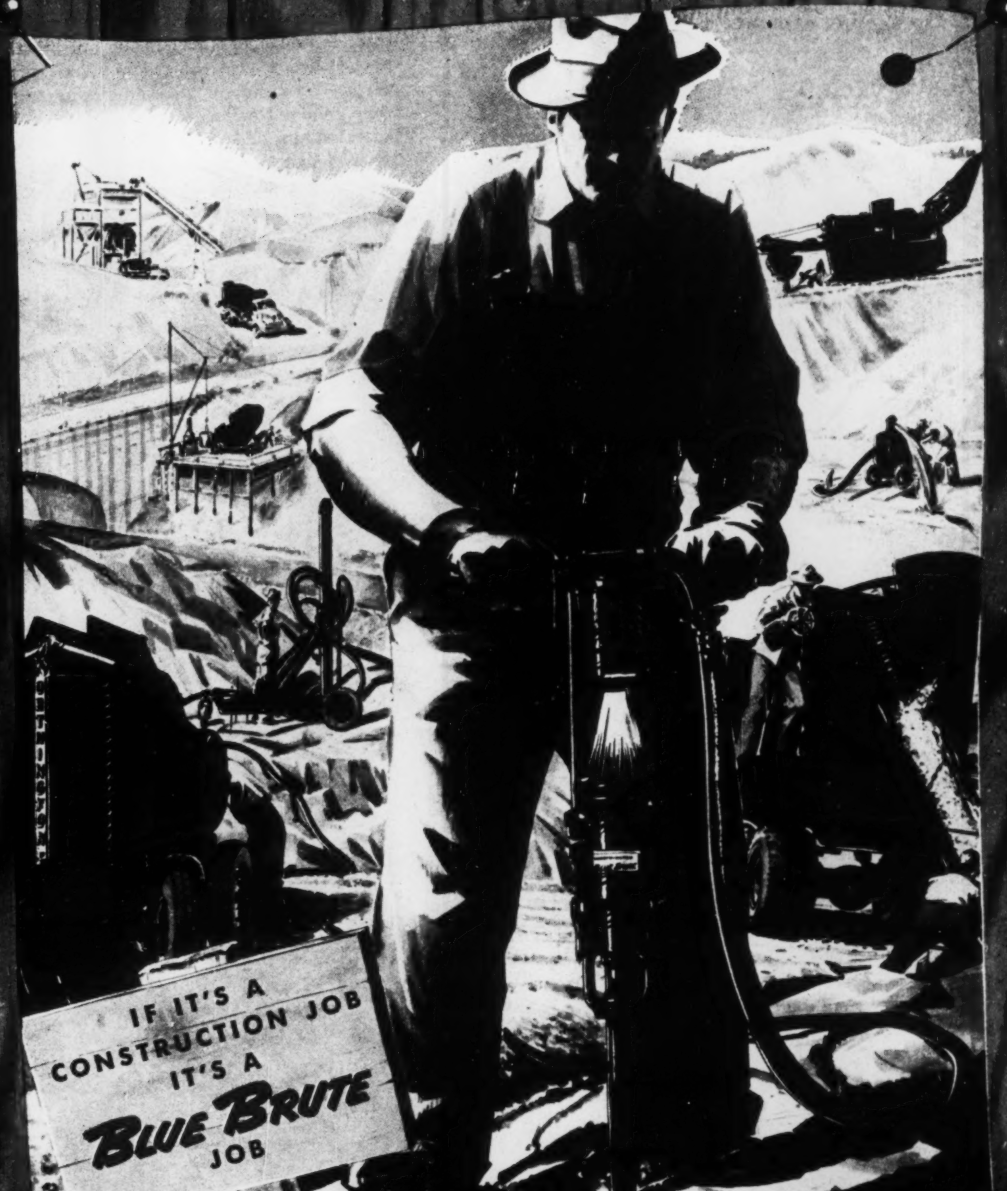
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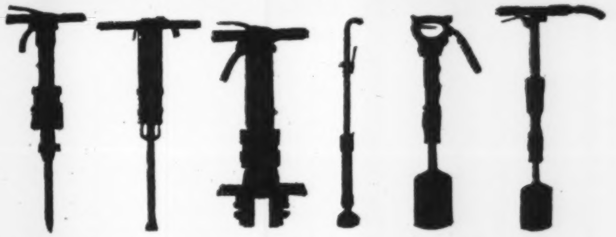

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Those who use it know that

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- **and costs less to use**

Continued from page 40

Ky., Bowling Green—Southern Bell Telephone Co., Hurt Bldg., Atlanta, Ga., dial toll office, to Barge-Thompson Co., 136 Ellis St. N. E., Atlanta, Ga. Est. over **$300,000.** Bids 12/6. CD 11/24—ENR 12/2.

Ky., Louisville—Kenwood Homes, 614 E. Broadway, several residential developments. Owner builds, Over **$250,000.**

Ky., Owensboro—Southern Bell Telephone Co., Hurt Bldg., Atlanta, Ga., dial toll office bldg., to Barge-Thompson Co., 136 Ellis St. N. E., Atlanta, Ga. Est. over **$300,000.** CD 4/14—ENR 4/29.

La., De Ridder—Beauregard Memorial Hospital, c/o contractor, hospital, to W. C. Salley, Monroe, **$384,444.** Bids 12/22. CD 12/21—ENR 12/30.

La., Lake Charles—Trinity Baptist Church, Lake Charles, church, to T. Miller & Sons, Lake Charles. Est. over **$250,000.**

La., Natchitoches—St. Denis Hotel, c/o contractor, hotel, to Dyhre Constr. Co., P. O. Box 1021, Lake Charles, **$356,891.** CD 8/17—ENR 8/19.

Mass., Amherst—Amherst College, Amherst, Mead Memorial Museum, to Edmund J. Rappoli Co., Inc., 515 Massachusetts Ave., Cambridge, **$480,000.** McKim, Mead & White, 101 Park Ave., New York, N. Y., archts.

Mass., South Hadley—Mt. Holyoke College, Bd. Trustees, South Hadley, 2 story, two 1 story wings, rein.-con. brick, cast stone girls dormitory, to G. B. H. Macomber Co., 19 Milk St., Boston, Mass., **$663,750.** CD 11/9—ENR 11/18.

Mont., Missoula—Fox Intermountain Theaters, 514 16 St., Denver, Colo., theater, to Hightower & Lubrecht, Missoula. Approx. **$250,000.** Awarded 12/30. CD 11/24—ENR 12/16.

Pa., Phila.—Segal & Finestone, 531 E. Roosevelt Blvd., residential development, A St., separate contracts. **$250,000.**

Tex., Baytown—W. L. Jones, Jr., Greens Bayou, Houston, apartments (2nd half of Danubian, Sec. 2 sub-division), own forces. **$300,000.** CD 10/8.

Tex., Bellaire—J. S. Norman Bldg. Corp., 4815 Richmond Rd., Houston, addnl. housing, own forces. **$275,000.** CD 7/6—ENR 7/15.

Tex., Dallas—Wynne-Wood Housing Proj. 3, 2311 Salerno St., 25 dwellings, adjacent Wynnewood Div. Proj. 3, own forces. **$275,000.** CD 9/9—ENR 9/23.

Tex., Galena Park—Fred D. Leggett & Abe Zuber, 116 North St., Houston, 60 dwellings, own forces. **$375,000.** CD 12/27.

Tex., Houston—Deepwater Homes Development Co., Inc., c/o S. D. Anderson & Maurice Krull, 2005 Canal St., 150 residences, on 62 acre plot adjacent to Deepwater Townsite, own forces. Approx. **$800,000.** CD 11/1—ENR 11/18.

Tex., Houston—Fairworth Co., Inc., c/o W. F. Tarver, 2nd Natl. Bank Bldg., masonry, concrete, steel shopping center, Silber Rd. adjacent Westview Terrace, own forces. Approx. **$340,000.** CD 11/11—ENR 11/18.

Tex., Houston—Hall's Bayou Development Co., c/o Bud Holtz, Scanlan Bldg., 60 dwellings, own forces. **$550,000.** CD 12/27.

Tex., Houston—R. E. Klipper, 7615 Wallisville Rd., community center, to I. G. Audish Constr. Co., 1100 Blodgett St., Approx. **$250,000.** CD 12/7—ENR 12/9.

●**Tex., Houston**—Owner c/o Eugene Werlin, archt., 3501 Buffalo Dr., masonry, concrete, steel community center, concrete slab and pier fdn., Katy and Brogden Rds. Owner builds. **$1,000,000.**

Tex., Pasadena—Tatar Lumber Co., Pasadena, 145 dwellings. Owner builds. **$625,000.** CD 4/10/47—ENR 5/1/47.

Tex., Wichita Falls—J. A. Simmons, 2816 Grant St., housing. Owner builds. **$250,000.** CD 12/23—ENR 12/30.

Que., Dolbeau—Reverend Christian Brothers, Dolbeau, 4 story, bsmnt., 55x200 ft. concrete, structural steel, brick juvenat and residence, to L. Ouellett, Dolbeau. Est. **$500,000.** L. Mainguy, 1045 Chaumont St., Quebec City, archt. J. M. E. Guay, Inc., 1010 St. Catherine St., Montreal, engr.

●**Que., Montreal**—Bank of Canada, 234 Wellington St., Ottawa, Ont., bank, Victoria Square, to Foundation Co. of Canada, Ltd., 1900 W. Sherbrooke St. Est. **$2,500,000.** T. Ganglin Eng. Co., Dominion Square Bldg., engr. CD 5/18/45—ENR 5/31/45

INDUSTRIAL BUILDINGS

BIDS ASKED

January 19

Ga., Thomaston—MILL—Thomaston Mills, Thomaston, mill addn. Over $100,000. Robert & Co., 92 Poplar St., Atlanta, archts.

January 20

Minn., Willmar — WAREHOUSE, etc. — Kandiyohi Co-operative Electric Power Assn., O. N. Gravgaard, pres., 1 story, brick, tile warehouse and office. $125,000. Plans deposit $15. Long & Thorshov, 400 Metropolitan Life Bldg., Minneapolis, archts. CD 6/24/48—ENR 7/8/48.

January 27

S. C., St. Matthews—WAREHOUSE, etc.—Tri-County Electric Co-operative, Inc., St. Matthews, warehouse and office. Plans deposit $25. Southern Eng. Co., 699 Spring St. N. W., Atlanta, Ga., archts.

January 29

Que., Noranda — COMMUNICATIONS — Northland Transportation Comn., North Bay, Ont., 1 story, bsmnt., 47 x 80 ft., concrete, structural steel, brick communications bldg. $170,000. Plans deposit $25. Bruce, Brown & Brisley, 12 E. Bloor St., archts.

Bids Asked

Conn., Torrington—SALES and SERVICE—Cornello Motor Sales Co., 45 Migeon Ave., brick, concrete sales and service auto showrooms and service garage, $68,000. Carl Victor Johnson, 7 College Ave., archt.

Ill., Chicago—WAREHOUSE—Chicago, Burlington & Quincy R. R., H. R. Clarke, ch. engr., 547 W. Jackson St., two 1 story, 50 x 1,000 ft. warehouses, incl. dock. R. A. Simon, c/o owner, structural engr.

●**Tex., Houston** — PLANT, etc. — National Steel Products Co., 1901 Franklin St., steel girders, steel siding and roofing, steel fabricating plant, $750,000; warehouse, $275,000. Engineering Dpt. Weirton Steel Co., Weirton, W. Va., engr. CD 12/16/46—ENR 12/26/46.

SOON LETS CONTRACT

Mass., Fitchburg — POWER STATION — Fitchburg Gas & Electric Light Co., 655 Main St., soon lets contract 4 story, brick power station addn. Approx. $250,000. Charles T. Main, Inc., 80 Federal St., Boston, engr. CD 11/7/45—ENR 11/22/45.

Tenn., Chattanooga—WAREHOUSE—Dixie Savings Stores, Inc., c/o Wm. A. Martin, archt., James Bldg., soon lets contract warehouse. $250,000. CD 12/10—ENR 12/23.

Tenn., Elizabethton — PLANT — American Bemberg Corp., c/o Robert & Co., archts., 92 Poplar St., Atlanta, Ga., soon lets contract textile plant addn. Over $75,000. CD 11/8—ENR 11/18.

LOW BIDDERS

N. M., Corona—PLANT—Central New Mexico Electric Co-operative, Corona, rejected bids Dec. 16, remodeling electric generating plant. CD 12/6—ENR 12/9.

Tex., Dallas—SALES, SERVICE, STORAGE—Bankston-Hall Motors, Inc., Ross and Olive Sts., auto service, sales, storage, display, from Cedric Burgher, 3027 Main St., **$76,000.** CD 12/27.

CONTRACTS AWARDED

Ala., Birmingham—WAREHOUSE, etc.—Mayer Electric Co., c/o contractor, warehouse and office, to Lindstrom & Pattillo, 209 S. 18 St Est. over **$75,000.**

Fla., Hialeah—WAREHOUSE—Pan American Corp., 3700 N. W. 54 St., warehouse. Owner builds, **$75,000.**

Ill., Aurora—PLANT—All Steel Equip. Co., 401 Griffeth Ave., plant addn., to Algot B. Larson, 3837 W. Lake St., Chicago. Est. **$240,000.** CD 11/23—ENR 12/2.

●**Ill., Bellwood**—FACTORY, etc.—Chicago Screw Co., 1026 S. Homan St., 1 and 2 story, brick, concrete, steel factory, office waterhouse, etc., to George Sollitt Constr. Co., 109 N. Dearborn St. Est. **$4,000,000.**

Ill., Chicago—WAREHOUSE, etc.—James Lees & Sons, 222 North Bank Dr., general contract 1 story, brick warehouse and office, to Clearing Industrial Dist., 6455 S. Central Ave. Est. **$300,000.** J. S. Cromelin, archt., c/o contractor.

Ill., Chicago—FACTORY—Shotwell Mfg. Co., 3501 W. Potomac St., general contract 1 story, brick, concrete, steel, factory addn., to W. H. Lyman Constr. Co., 134 N. LaSalle St. Est. **$300,000.** Lee A. Bailey, 134 N. LaSalle St., archt.

Ill., Chicago—FACTORY—Sunbeam Corp., 5600 W. Roosevelt Rd., 1 story 180x725 ft., brick factory, 5400 W. Roosevelt Rd., to Campbell, Lowrie, Lautermilch Corp., 400 W. Madison St. Est. **$900,000.** Olsen & Urbain, 5 S. Wabash Ave., archts.

●**Ill., Franklin Park**—WAREHOUSE—Kaiser Frazer Corp., Willow Run, Mich., 1 story, brick, concrete auto parts warehouse, to Edwin E. Hartrich & Son, 141 W. Jackson Blvd., Chicago, **$1,000,000.** Albert Eiseman, 141 W. Jackson Blvd., Chicago, archt.

Ind., Indiana Harbor—MILL—Youngstown Sheet & Tube Co., Stambaugh Bldg., Youngstown, O., design and construction brick, steel, concrete mill for weldpipe production, to Aetna Standard Eng. Co., Home Saving & Loan Bldg., Youngstown, O. CD 9/9—ENR 9/23.

Md., Baltimore—STORAGE—Mangels Herold Co., Inc., 1414 Key Highway, 1 story, 13x86x128 ft., brick, cinder block storage bldg., 1402-1410 Key Highway, to Morrow Bros., Inc., 2315 N. Charles St., Baltimore, Zone 18, **$98,000.** W. A. Bowersock, 4210 Ridgewood Ave., archt.

Mo., St. Louis—SERVICE and SALES—Louis S. and Robet C. Goltermarl, c/o contractor 1 story, 82x122 ft. brick, steel, sales and service building, to L. O. Stocker, 1673 Arcade Bldg., 812 Olive St., Zone 1. Est. Approx. **$100,000.** E. J. Lawler, 1673 Arcade Bldg., 812 Olive St., archt.

Mo., Springfield — DIESEL SHOPS — St. Louis-San Francisco Ry. Co., H. B. Barry, ch. engr., Springfield, erecting steel for superstructure diesel shops, to Brice Building Co., Inc., 1021 2 Ave., N. Birmingham, Ala. **$225,000.**

O., Sandusky—FACTORY—Cellulo Co., Sandusky, 1 story, 50x100 ft. factory addn. of Natco Tile with steel trusses and steel sash, to Edward Feick, 319 Decatur St., Zone 1.

Pa., Lester—INDUSTRIAL—Lester Piano Mfg. Co., Lester, 1 story, masonry industrial bldg. addn., to Haverstick Borthwick Co., 1505 Race St., Phila., **$70,000.**

Tex., Dallas — PACKING PLANT — Rath Packing Co., 311 S. Lamar St., remodeling meat packing plant, to York Corp., 1239 Liberty Bank Bldg., **$70,000.**

Tex., Dallas — WAREHOUSE — Thompson-Hayward Chemical Co. of Texas, c/o contractor, 36,000 sq. ft. concrete block agriculture and industrial chemical warehouse, to Vilbig Bros., 2026 Singleton Blvd, **$145,000.**

Tex., San Antonio—SHOP—San Antonio Buick Co., 501 Broadway, c/o Henry H. Bryant, Proj. A, shop; Proj. B, shops repairing and remodeling, to Chamberlain & Strain, 607 Natl. Bank Comm. Bldg., **$168,343.** Bids 12/29. CD 12/17—ENR 12/23.

Tex., San Antonio—WAREHOUSE—Steves Industries, 704 E. Commerce St., 1 story, 12,000 sq. ft. masonry warehouse addn., to Joe Joeris, 219 Avenue A, **$76,000.** National Biscuit Co., 704E. Commerce St., lessee. Kurt D. Beckmann, Commerce St., archt.

Tex., Woodsboro—PLANT—Bayside-Richardson Co-operative Gin Co., Woodsboro, gin plant, 8 mi. southeast of here, force account. **$200,000.** CD 12/30.

Wash., Richland—GARAGE, etc.— Cahoon Motors, Yakima, garage and sales agency, to W. B. Edmiston & Sons, Yakima. Est. **$100,000.** J. S. Villesvik, Liberty Bldg., Yakima, archt.

Wis., Madison—GARAGE—Wisconsin Farm Supply Co., 18 S. Thornton St., 1 story, 60x160 ft., steel, concrete block garage, concrete fdn. to George Cnare, 1446 Morrison St. H. C. Balch, 16 N. Carroll St., archt.

Wis., Racine—FACTORY—Andis Clipper Co., 1718 Layard Ave., 2 story, steel, brick factory addn., concrete fdn. Owner builds. **$68,000.** C. Mehring, Waterford, engr. CD 2/26—ENR 3/4.

B. C., Vancouver—MOTOR COURT—Harry Powell, 5650 Angus Dr., motor court 2075 Kingsway, to R. H. Fulton, 3681 W. Seventh Ave., approx., **$100,000.** J. H. Harvey, 303 Kingsway, archt.

Que., Montreal—WAREHOUSE—Fortier Co. Ltd., 1195 Panet St., concrete, structural steel, brick warehouse, to Corinthian Constr. Co. Ltd., 5726 W. Sherbrooke St. Est. Approx. **$90,000.** Fetherstonbaugh & Assoc., 660 Catherine St. W., archts.

Que., Montreal—WAREHOUSE, etc.—Gattuso Olive Oil Corp., 6696 Papineau Ave., 100x200 ft., concrete, brick warehouse, Cote de Lirse Rd., to A. Gratton Inc., 3440 Scheiter St., **$229,399.** CD 9/27—ENR 10/28.

UNCLASSIFIED

BIDS ASKED

After January 14

♦**Arizona**—TRANSMISSION LINE—Bureau Reclamation, Dpt. Interior, Bldg. 1-A, Denver Federal Center, Denver, Colo., 30 mi. Coolidge-Electric Dist. No. 5. 115kv transmission line from Coolidge substation on Phoenix-Tucson No. 1 line to Electric District No. 5 substation on Phoenix-Tucson No. 2 line, Davis Dam Proj., near Eloy.

After January 17

♦**Montana**—TRANSMISSION LINE—Bureau Reclamation, Dpt. Interior, Billings, 3.5 mi. 161 kv. wood pole, H-frame, 3 phase, single circuit transmission line between Loma and Fort Benton. CD 9/8/44—ENR 9/21/44.

January 21

O., Macedonia—SERVICE LINES, etc.—Dpt. P. Wks., George B. Sowers, dir. State Dpts. Bldg., Columbus, service lines and tunnels extens. at Hawthornden State Hospital. Beiswenger & Hoch, 1659 W. Market St., Akron, engrs.

After January 25

♦**Idaho** — TRANSMISSION LINE — Bureau Reclamation, Dpt. Interior, Boise, 52 mi. single circuit, 3-phase, wood pole, H-frame Goshen to Palisades 115 KV transmission line, southeast of Idaho Falls.

January 27

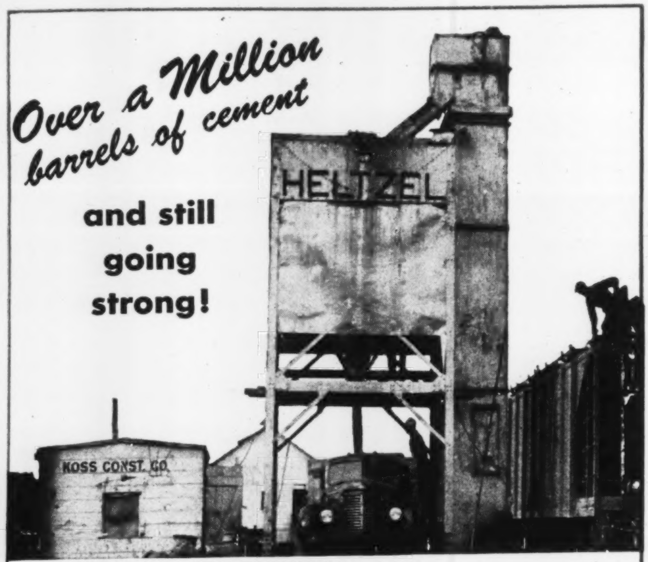
California—SIGNAL SYSTEMS, etc.—State Div. Hys., State Bldg., Los Angeles, furnishing, installing full traffic actuated signal sys., highway lighting on Santa Ana Parkway between La Verne and Eastland Aves. incl. Atlantic Blvd. Interchange, Los Angeles Co. G. T. McCoy, Sacramento, state hy. engr.

January 27

♦**N. C., Camp Lejeune (Br. New Bern)**—STREET LIGHTS, etc. — Pub. Wks. Office, Bldg 1005, Marine Barracks, installing 4 addnl. street lights in parking area in front of Administration Bldg., U. S. Naval Hospital, Spec. 21699; overhead static line, at Marine Barracks, Spec. 21478. Plans deposit $10 each.

February 17

♦**Wyoming** — TRANSFORMERS, etc. — Bureau Reclamation, Dpt. Interior, Bldg 1-A, Denver Federal Center, Denver, Colo., furnishing, del. f.o.b. cars shipping point f.o.b. cars Thermopolis, outdoor autotransformer; self-cooled outdoor transformers; power circuit breakers; outdoor selector-type switch;



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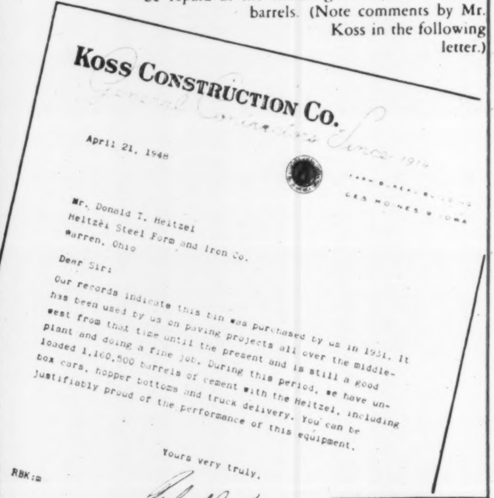

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Warren, Ohio

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Vice President

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†Wyoming — CIRCUIT BREAKERS, etc. — Bureau Reclamation, Dpt. Interior, Bldg 1-A, Denver Federal Center, Denver, Colo., furnishing, del. f.o.b. cars shipping point or f.o.b. cars Emery or Bonneville, outdoor power circuit breakers; outdoor selector-type switch; manually and hook-operated outdoor disconnecting switches; outdoor horn-gap switch, for Boysen Switchyard, Boysen Unit, Missouri River Basin Proj., Spec. **2527.**

About February 18

Minn., Faribault — STEAM TUNNELS — State Dpt. Admin., P. T. Peterson, dir. Purchases, 19 State Capitol, St. Paul, steam tunnels for State School for Blind. $55,000. H. H. Crawford & P. P. Bross, Rochester, archts.

Bids Asked

Conn., Groton—PARK IMPRVS.—Town, Bd Wardens & Burgesses, Groton, (selected list bidders) playgrounds, facilities for sports recreation bldg., Washington Park. G. L. Bilderbeck, 76 Starr Hill Rd., engr. CD 12/10—ENR 12/16.

Ind., Fort Wayne—SWIMMING POOL—City Park Bd., Fort Wayne, 50x82 ft. swimming pool, 1 story, 32x120 ft. bath house, children's wading pool, McMillen Park, $75,000. T. R. Shoaff, 406 W. Berry St., Ackley Bradley & Day, Sewickly, Pa., and F. Ellwood Allen Organization, 101 Park Ave., New York, N. Y., consult. archts.

LOW BIDDERS

Calif., Susanville—GRANDSTAND—Lassen Co., Courthouse, Dec. 27, 2,400 seating steel, grandstand, cement floor at Lassen County Fairgrounds, from Hageman & Co., 911 Main St., **$123,900.** CD 12/8—ENR 12/16.

†Idaho—TRANSFORMERS—Bureau Reclamation, Dpt. Interior, Bldg. 1A, Denver Federal Center, Denver, Colo., Dec. 23, three 3,000 kva, 76,300/132 wye to 33,000 delta volt, single-phase 60 cycle, oil immersed, self cooled, outdoor, power transformers, one 138,000 volt, 800 ampere, 1,500,000 kva interrupting capacity, and one 34,500 volt, 600 ampere, 500,000 interrupting capacity, outdoor type power circuit breakers, for installation in interconnecting substation, Idaho Power Co., Minidoka Proj., Spec. 2474, from Westinghouse Electric Co., Gas & Electric Bldg., Denver, Colo., Schedule 1 **$80,000.** CD 11/18—ENR 11/25.

†Washington — TRANSMISSION LINE — Bonneville Power Admin., 729 N.E. Oregon St., Portland, Ore., Dec. 15, 19.42 mi. Scenic-Index Sect. Foster Creek-Snohomish 230 kv transmission line, King and Snohomish Counties, Inv. 4407, from Parker-Schram Co., Builders Exchange Bldg., Portland, Ore., **$722,871.**

Wis., Milwaukee — RADIO STATION — Hearst Radio Corp. (WISN), 123 W. Michigan St., Zone 3, cancelled bids to have been opened Jan. 5, 4th story and remodel for radio station. **$350,000.** Will re-advertise CD 12/17—ENR 12/23.

†T. H., Oahu—CEMETERY—U. S. Eng., P. O. Box 2240, Fort Armstrong, Honolulu, T. H., Dec. 21, fourth increment of constr for National Memorial Cemetery of the Pacific at Punchbowl Crater, Eng-94-612-49-12, from James W. Glover, Ltd., Honolulu, **$204,801.** Est. $207,136. CD 12/10.

CONTRACTS AWARDED

Ala., Birmingham — RADIO STATION — Radio Station WSGN, c/o D. O. Whilldin, archt., Empire Bldg., radio station, to Tower Constr. Co., c/o D. O. Whilldin, archt., Empire Bldg. Est. over **$50,000.**

Ala., Greensboro — SWIMMING POOL — City, swimming pool, force account. **$50,000.** O'Toole Eng. Co., Watts Bldg., Birmingham archt.

La., Gretna — RAILROAD PLATFORMS and TUNNELS—Southern Cotton Oil Co., Canal Bank Bldg., New Orleans, 1st floor slab, railroad platforms, and tunnels for shortening plant, to R. P. Farnsworth & Co., 1515 S. Salcedo St., New Orleans. **$116,875.** Bids 12/21.

Miss., Jackson—SWIMMING POOL, etc.—City, Dec. 21, swimming pool and bath house, Lynch St. Park, to Garber-Brooks Constr Co., 1508 N. Mill St., Jackson, **$105,501.** CD 12/10/48—ENR 2/21/46.

Neb., Lincoln—CARILLON TOWER—University of Nebraska, Lincoln, carillon tower, to Olson Constr. Co., 410 S. 7 St., **$85,000.**

O., Columbus—TELEVISION STUDIO, etc.—TV, Inc., c/o contractors, design and construction, 2 story, 61x142 ft., steel, concrete television studio and transmitter bldg., to The Austin Co., 16112 Euclid Ave., Cleveland. Est. **$500,000.**

Tex., Dallas—RADIO STATION—Radio Station KRLD, Adolphus Hotel, reconstructing radio station, mostly 2 steel towers 492 ft and 475 ft. high, rein.-con. fdn., own forces **$75,000.**

Ont., North Bay — RADIO STATION — Owner, c/o H. E. Price, 112 Worthington Ave., 65 x 100 ft., concrete, steel, brick radio station, to Price Signs & Displays, 555 Fraser St. Est. **$75,000.** J. B. Sutton, 99 Larch St., Sudbury, archt.

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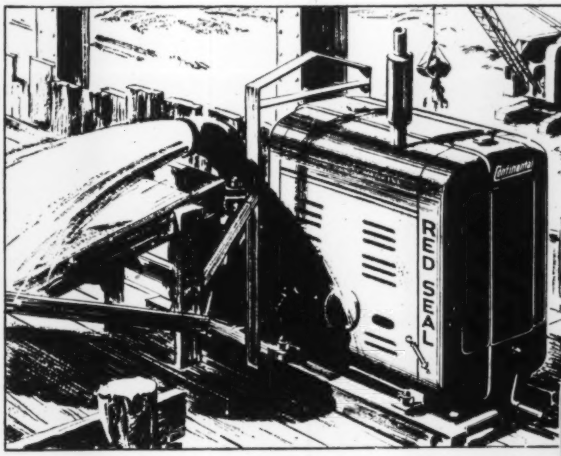

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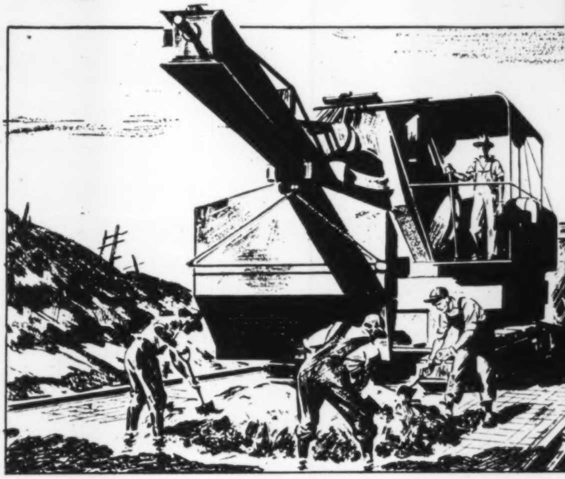

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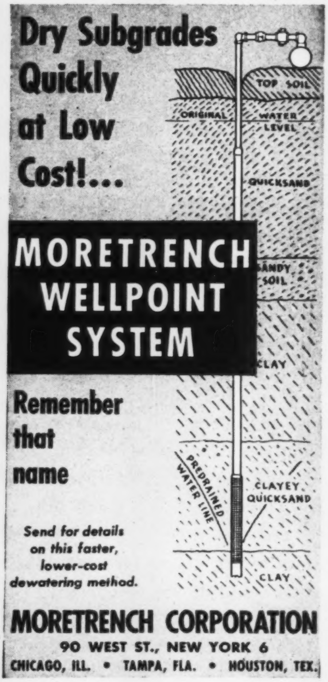
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CONSTRUCTION REPORTS Second Section

Third Section Construction Reports on Page 53

WATER SUPPLY

BIDS ASKED

After January 14

†N. M., Tucumcari—Bureau Reclamation, Dpt. Interior, Bldg 1-A, Denver Federal Center, Denver, Colo., drilling, casing, testing 3 water supply wells, near here.

January 18

Ark., West Memphis—City, erecting foundation for water tank. Plans deposit $15. Bids 12/21 rejected. A. E. Heagler, 315 Exchange Bldg., Little Rock, engr.

January 25

California—State Div. Architecture, P. Wks. Bldg., Sacramento, water services at Humboldt Redwood State Park and Burlington Campground. Anson Boyd, Sacramento, state archt.

Tex., Poteet—G. C. Cowley, mayor, at office H. R. DeVilbiss, secy., City Hall, water supply and distr. sys. addns., extens. Plans deposit $15. James V. Curnutte, 1622 Transit Tower, San Antonio, consult. engr. CD 1/5.

January 26

Tex., Dallas—City, L. Goforth, secy., laying 36 in. c.i. mains between Bachman Plant and Washington St. and Central Sect. of the overall main. $175,000. CD 7/9—ENR 7/22.

LOW BIDDERS

Calif., Oakland—East Bay Municipal Utility Dist., 512 16 St., Dec. 29, installing c. i. and welded steel watermains from Lafayette Aqueduct right-of-way to Colorado Reservoir and Grant Miller Pumping Plant to Bryant Reservoir, Spec. LS-448, from McGuire & Hester, 796 66 Ave., **$115,904**. CD 12/20.

●**O., Akron**—Dpt. Pub. Service, Marvin L. Davis, dir., Municipal Bldg., rejected bids Dec. 16, Contr .415 installing electrical sys. at Akron Water Supply Sys. 2 mi. north of Kent, in existing and proposed new bldg. at Cuyahoga River Pumping Station, L. B. **$135,990**; rejected bids Dec. 9, Contr. 411, pumping station rehabilitation at Akron Water Supply Sys. 2 mi. north of here, L. B. **$1,062,405**, will re-advertise. CD 11/24—ENR 12/2 and CD 11/18—ENR 11/25.

CONTRACTS AWARDED

Mo., Excelsior Springs—Missouri Power & Light Co., 106 W. High St., Jefferson City, WW imprvs. Sect. 1, general construction work to filter plant, to E. R. Kieselbach, 1301 W. High St., Jefferson City, **$17,700**; Sect. 2, filter work, to E. W. Bacharach & Co., Rialto Bldg., Kansas City, Mo. **$34,275**. Black & Veatch, 4706 Broadway, Kansas City, 2, Mo., engrs.

Okla., Enid—City, 18 mi. 30 in. rein.-con. pressure water pipe, to Lock Joint Pipe Co., 150 Rutledge Ave., East Orange, N. J., **$965,837**. Est. $1,000,000. Bids 12/14, awarded 12/21. CD 12/8.

Tex., Beaumont—Port Acres Water Dist., Beaumont, water and sewer lines, to Beaumont Constr. Co., 1720 Crockett St., **$187,299**. Charles Davidson, county engr.

Tex., Highland Park—Park Cities Water Dist., Highland Park, 27,834 lin. ft. 14 and 24 in. c.i. water pipelines at Park Cities (Highland Park P.O.) and University Park (Dallas P.O.), to W. G. Cullum Co., Great Natl. Life Bldg., Dallas, **$424,482**. Bids 12/31. CD 12/14—ENR 12/16.

Tex., Houston—Wyatt C. Hedrick, 5201 Fannin St., c. i. waterlines and facilities in O. S. T. Rd. near S. Main St., own forces. **$40,000**.

SEWERS, WASTE DISPOSAL

BIDS ASKED

January 17

Pa., Phila.—Dpt. P. Wks., City Hall Annex, sewers, Schedule A, various locations for new housing, over $100,000; Schedule B, various locations for other than new housing, over $100,000. A. Zane Hoffman, c/o owner, ch. engr. CD 12/1/43.

January 18

New York—President Queens Boro, 120-55 Queens Blvd., Kew Gardens, Zone 15, reconstructing sanitary sewer, appurtenances in bed of former 150 St. from approx. 125 ft. south of former Peck Ave. to point 141 ft. southerly.

January 25

La., Mansfield—City, J. H. Lewing, mayor, City Hall, sewer exten, outfall line, sewage disposal plant. Plans deposit $15. Pan-American Engineers, 1418 Third St., Alexandria, engrs. CD 8/19—ENR 8/26.

January 25

N. Y., Brooklyn—Dpt. P. Wks., Municipal Bldg., New York, Zone 7, Contr. 4, pump and powerhouse at Owls Head Sewage Treatment works, bounded on north by Long Island R.R. on south and west by New York Bay and east by Shore Parkway. Plans deposit $100; Contr. 11, electrical equip. Owls Head Sewage Treatment Works. Plans deposit $50. Extended date. CD 12/13—ENR 12/16.

LOW BIDDERS

Colo., Denver—City and Denver Co., City and County Bldg., Dec. 27, creating, establishing Westwood Sanitary Sewer Dist. 1, from Latimer Constr. Co., W. 9 and Wyndotte Sts., Schedule 2, **$113,194**, Schedule 3 vitr. pipe, **$98,234**, Schedule 4 vitr. pipe, **$97,230**; from Winslow & McMillon, 3002 S. Huron St., Schedule 1 concrete pipe **$138,799**. Est. $677,844. CD 12/22.

La., Metaire—Sewerage Dist. 1, 600 Helois Ave., imprv. sanitary sewerage sys., from Keller Constr. Co., 7900 Palm St., New Orleans, **$113,612**.

●**Neb., Omaha**—City, Jan. 4, South Omaha sewer constr., from Michigan Sewer Constr. Co., 21720 W. 8 mile Rd. Detroit, Mich. **$2,074,801**. CD 11/16—ENR 11/18.

CONTRACTS AWARDED

●**Calif., Oakland**—East Bay Municipal Utility Dist., 512 16 St., Sect. 4, North Interceptor Sewer, Spec. SD-30, to Stolte Inc., 8451 San Leandro St., Oakland, and United Concrete Pipe Corp., Box 425, Baldwin Park, **$1,435,160**. Bids 12/8. CD 12/16—ENR 12/23 under L.B.

●**Colo., Denver**—City and Denver Co., City and County bldg., sewage treatment plant addns., to Thomas Bate & Sons, 2311 10 St., **$1,447,000**. Est. $1,461,132. Bids 12/28, awarded 12/30. CD 12/29—ENR 1/6.

Pa., Norristown—Norristown Boro, sanitary sewer E. Main St., etc., own forces. **$50,000**. Henry Rothrock, boro engr. CD 12/28/45—ENR 1/17/46.

Tex., Houston—Wyatt C. Hedrick, 5201 Fannin St., sanitary sewers, in O.S.T. Rd., near S. Main St., own forces. **$65,000**.

Va., Richmond—City, storm sewers in Willow Lawn area of Glenburnie, to E. G. Bowles, 1705 Brook Rd., **$133,054**; supply precast concrete pipe for sewers in Willow Lawn area, to Concrete Pipe & Products Co., Inc., Belt Blvd. and Petersburg Pike, **$49,434**. Bids 12/21. CD 12/15.

BRIDGES

BIDS ASKED

January 24

Pennsylvania and New Jersey—At office Joseph K. Costello, secy. The Delaware River Joint Comn., Administration Bldg., Bridge Plaza, Camden, N. J., widening bridge roadway between Bent 14 near Fourth St., Phila., Pa. and Bent 29 near Fourth St., Camden, N. J., on bridge connecting cities of Phila., Pa. and Camden, N. J., Contr. 4. Plans deposit $10; adv. ENR 1/13.

February 10

†Delaware—U. S. Eng., 121 N. Broad St., Phila., 1, Pa., replacing lift span counterweight ropes Reedy Point Bridge crossing the Chesapeake and Delaware Canal, south of Delaware City, Inv. No. Eng 36-109-49-87.

LOW BIDDERS

Connecticut—State Hy. Dpt., Hartford, Jan. 3, 3 span plate girder bridge over NY, NH and H R.R. Willimantic Branch on the North Meadow Expressway, FAP-UGI-139 (2); and 4 span beam bridge over NY, NH and H R.R. Springfield Branch and service road on North Meadow Expressway FAP-UGI-139 (4), both Hartford, from C. W. Blakeslee & Sons, Inc., 59 Waverly St., New Haven, **$225,06'** and **$241,489** respectively. CD 12/27—ENR 12/30.

Maryland — State Rds. Comn., Baltimore, Jan. 4, 2 steel beam, concrete bridges, 1 three 33 ft. span over Norwich Creek, roadway and safety curb, other five 40 ft. spans over Tuckahoe Creek, roadway, 2 safety curbs, Queen Annes Hillsboro By-Pass, Contr. 173-2-215 and Q 24-2-215, Caroline and Queen Annes Counties, from Empire Constr. Co., 31 S. Calvert St., Baltimore, **$154,096**. CD 12/23—ENR 12/30.

●**New Jersey**—State Hy. Dpt., Trenton, Jan. 6, substructure Route 35, Manasquan River Bridge, Monmouth and Ocean Counties, from R. B. Jaggard Eng. Co., Highland Ave., Westmont, **$1,625,035**. CD 12/20—ENR 12/23.

Oklahoma—State Hy. Dpt., Oklahoma City, received no bids Jan. 4, one pile bridge over North Canadian River and bank protection, at Greenfield, Blaine Co. **$56,980**.

CONTRACTS AWARDED

●**Ohio**—State Hy. Dpt., Columbus, asph. on macad., constructing continuous steel girder bridge with concrete deck and substructure, Bridge No. FR 782-02 over Scioto River, 0.196 mi. Franklin Co., Tyre T-35 and structure repair, asph. and replacing existing floor and sidewalk of deck plate girder bridge with new concrete slab floor, sidewalk and railing on existing steel girders and altering backwalls to fit, 0.07 mi. Br. No. FR 40-152 over Oliver Creek U. S. Rt. 40, Franklin Co. to Visintine & Co., 1315 Edgehill Rd., Columbus, **$707,000** est. $724,000 and **$82,900** est. $84,700 respectively***Type T-71 and structures, c. conc. and constructing grade crossing elimination proj. with the N. Y. C. R.R. and grade separation and traffic interchange consisting continuous steel girder and continuous steel beam bridge with concrete deck and substructure, Bridge No. CU-2-219 over State Rt. 2 and New York Central R.R., steel beam bridge with concrete deck and substructure, Eddy Rd. bridge over Hazeldell Rd and Kirby Ave., 2.235 mi. Cuyahoga Co., to The Horvitz Co., 913 Midland Bldg., Cleveland, **$1,448,199** est. $1,988,000***asph. on macad.

0.782 mi. U. S. Rt. 5, constructing concrete slab bridge with concrete abutments. Bridge No. AS-6-48-A, branch of Mud Creek, continuous steel beam bridge with concrete deck and substructure, Bridge No. AS-6-97 over Rock Creek, continuous concrete slab bridge with capped pile substructure Br. No. AS-6-194-A, over Pymatuning Creek, Ashtabula Co., to Porterfield & Binger Constr. Co., 222 Rayen Ave., Youngstown, **$237,717** est. $227,100***asph. 0.62 mi. U. S. Rt. 23, two 23 ft. span continuous concrete slab bridge; steel beam bridge with concrete deck of 30 ft. span; two 32 ft. concrete slab bridges, Pike and Ross Counties, to W. J. Seidensticker Co., 209 S High St., Columbus, **$195,422** est. $207,600. Grand total $2,671,238. Bids 12/21, awarded 12/29. CD 12/15.

Oklahoma—State Hy. Dpt., Oklahoma City, concrete girder bridge on farm-to-market road, Delaware Co., to Amis Constr. Co., 1647 Exchange Bldg., Oklahoma City, **$67,914.** Est. $69,730. CD 12/27.

STREETS AND ROADS

LOW BIDDERS

January 22

†Missouri—P. Rds. Admin., c/o Dist. Ranger, U. S. Forest Service, Fredericktown, c. conc., grav. or stone surf., etc. 3.985 mi. Missouri Forest Hy. Proj. 44-A, St. Francois Co. Plans deposit $10. CD 3/4/43—ENR 3/18/43.

LOW BIDDERS

Arizona—State Hy. Dpt., Phoenix, asph. 9.4 mi. Payson-Pine Hy., Gila Co., from Vinnell Co., Inc., Alhambra, Calif., **$245,169.**

Arizona—State Hy. Dept., Phoenix, Dec. 21, asph. 10½ mi. Yuma and Gila Bend Hy., Yuma Co., from Kolob Constr. Co., 610 N. Central Ave., Phoenix, **$99,717.**

Colorado—State Hy. Dpt., Denver, Dec. 22, surf., structures 3.684 mi. Hys. 145 and 147 between Dolores and Lewis Combined Colorado Proj. S-0153 (1) and S-0156 (2), Montezuma Co., from R. L. Hanes & Co., P. O. Box 807, Denver, **$145,210.** Est. $150,976. CD 12/15.

Connecticut—State Hy. Dpt., Hartford, Jan. 3, bit. 13,196 ft. North St., FAP-S-50 (1), Suffield, from Roncari Constr. Co., 252 Main St., Windsor Locks, **$118,872*****c. conc. 2315 S. Main St., U. S. Rt. 44, 2 span 126 ft. steel beam bridge over Still River, FAP U-131 (11), Winchester, from Charter Oak Constr. Co., 525 Main St., Hartford, **$329,857*****b. conc. 4 sections New London Turnpike, Trunk Line Proj., Salem-Montville, from Fred Onuparik, 501 Broad St., New London, **$319,694.** CD 12/27—ENR 12/30.

●Michigan—State Hy. Dpt., Lansing, c. conc. 5.737 mi. U. S. 16 relocation, M 104, Nunica, FE 70-51 C-4; F 70-42 C-4; M 70-42 C-5, Ottawa Co., from Gould & Cross, R 4, Grand Rapids, **$298,763*****c. conc. 4.607 mi. U. S. 27, 0.5 mi. north of Cutler Rd. to ⅛ mi. north of Price Rd., c. conc. 3.736 mi. U. S. 27, from ⅛ mi. north of Price Rd. north to Townsend Rd., F 19-41, C-3 and F 19-41, C-5 Clinton Co., from Hertel-Deyo Co. & Alpine Constr. Co., 5205 S. Division St., Grand Rapids, **$829,808*****grading, drainage structures 5.133 mi. M 35 from west of Perkins northwest to Trombly, SS 21-34 C-2, Delta Co., from Straits Constr. Co., Escanaba, **$94,171*****stabilized aggregate surf. course 12.589 mi. M 28, M 75-9 C-3; F 75-9 C-4; F 48-2 C-4; F 48-26 C-2; F 2-07 C-9, Luce, Alger and Schoolcraft Counties, from I. L. Whitehead Co., Sault Ste. Marie, **$206,016.** M. H. Frimodig, hy. engr.

Miss., Jackson — City, City Hall, Dec. 30, paving, imprv., street exten. Lamar St. from Griffith to George Sts. and High St. exten., from Clark Brothers Constr. Co., First Federal Savings and Loan Bldg., **$95,765.**

Pa., Phila.—Dpt. P. Wks., City Hall Annex, Dec. 30, paving Schedules A-2 and B-4, from Leva Bros., 5416 Rising Sun Ave., **$67,900*****Schedules A-1 and A-5, from Sabatini Co., 2315 Mifflin St., **$61,760*****Schedule B-1 from D & C Spinosa Co., 2 N. Jerome St., Allentown, **$61,488*****Schedules B-2 and B-3 and Schedules B-4, B-5 and B-6, from Harry C. Erb, Schaff Bldg., **$62,275** and **$57,231** respectively.

CONTRACTS AWARDED

●New York—B. D. Tallamy, supt. Dpt. P. Wks., Albany, reconstructing 7.58 mi. Route 7 from Schenectady city line southeasterly to intersection of Forts Ferry Rd. Schenectady Co., to Johnson, Drake & Piper, 86 Trinity Pl., New York, **$2,671,202.** Bids 11/10. CD 11/12—ENR 11/18, under LB.

●Ohio—State Hy. Dpt., Columbus, to Ohio Road Imprvt. Co., 30 E. Broad St., Columbus, asph. 10.043 mi., incl. constructing continuous concrete slab bridge with concrete substructure, Bridge WY-30N-159 over Rock Run, continuous concrete slab bridge with concrete substructure, Bridge No. WY-30N-198 over Indian Run and wid'n. roadway of steel beam bridge, constructing new railing, Bridge CR 30-N-14 over Broken Sword Creek, U. S. R. 30 N., Crawford and Wyandotte Counties, **$961,157** est. $965,500; b. conc. 3.142 mi. U. S. Route 6, Erie Co. **$72,437.** Est. $72,600; b. conc. 8.048 mi. St. Rt. 12, Erie and Sandusky Counties **$306,850** est. $313,800***to Heffner Constr. Co., 222 Fulton St., Celina, c. conc. and b. conc. 9.294 mi., wid'n continuous concrete slab bridge, Bridge No. CL-40-154A over D.T. and I. R. R.; wid'n. steel beam bridge by constructing steel beam with concrete deck extens. on concrete substructure, Bridge No. CL-40-196 over Beaver Creek, U. S. Route 40, Clark Co. **$1,333,262** est. $1,391,000.

To Churchill Constr. Co., 1126 State St., Lima, b. conc. 2.463 mi., constructing continuous steel beam bridge with concrete substructure and deck, Bridge AL-81-220 over Ottawa River, State Rt. 81, Allen Co. **$218,096** est. $219,200***to V. N. Holderman & Sons, Inc., 297 S. High St., Columbus, c. conc., 4.615 mi. State Rt. 16, constructing steel thru truss bridge with steel beam approach spans, concrete deck and substructure, Bridge TV-36-121 over Tuscarawas River, Tuscarawas Co. **$928,626** est. $1,087,000***to S. E. Johnson Co., P. O. Box 29, Maumee, b. conc. 4.98 mi. St. Rt. 2, Lucas Co., **$155,533** est. $159,200. ***to Arthur S. Langenderfer, Inc., 4690 W. Bancroft St., Toledo, b. conc. 3.123 mi. U. S. Rt. 20, **$94,408** est. $96,200; 3.304 mi. State Route 2, and **$87,041** est. $88,800 both Lucas Co.***to Shelly & Sands, Inc., Thornville, b. conc. 4.599 mi. U. S. Rt. 22, Muskingum Co. **$98,000** est. $99,200.

To Max J. Zeller, Inc., 297 S. High St., Columbus, b. conc. 5.063 mi. U. S. Rte. 35, Preble Co. **$105,950** est. $115,900***to Edgar Spring, Inc., Box 177, New Philadelphia, b. conc. 5.124 mi. U. S. Rte. 62, Holmes and Stark Counties, **$79,749** est. $79,900***to Hatcher Bros., 116 Schoolway, Mingo Junction, macad. bit. road mix 0.277 mi. State Rte. 213, constructing concrete box culvert consisting 3 cells, Jefferson Co. **$166,072** est. $182,000***to Newark Asphalt Co., West Poplar Ave., Newark, b. conc. 5.06 mi. U. S. 40, Licking and Muskingum Counties, **$80,020** est. $80,300***to Bremer & Bremer Sons, Inc., 81 W. Water St., Chillicothe, b. conc. 2.857 mi. U. S. Rte. 23, Ross Co., **$64,989** est. $66,000***to The Thorpe Constr. Co., 109 N. Union St., Akron, conc., b. conc. 1.634 mi. State Route 5 and 8, Summit Co., **$349,331** est. $331,700.

To DeSalva Constr. Co., 342 Elliot Ave., Cincinnati, stabilized-b. conc. 1.215 mi. U. S. Rte. 22, Hamilton Co., **$232,036** est. $266,100***to Daniel Davis, 402 Swetland Bldg., Cleveland, cement stabilized-bit. and bit. road mix 14.507 mi. State Rte. 86 and 534, Ashtabula Co., **$139,868** est. $156,460***to Harley E. Calvin & Co., Marietta, stabilized-bit. road mix, constructing two continuous concrete slab bridges with concrete substructures 0.411 mi. St. Rte. 56, Hocking Co., **$106,817** est. $115,230***to Nelson T. Bahan, 549 E. Court St., Urbana, stabilized-bit. constructing continuous steel beam bridge with concrete deck and substructure Bridge CL-71-02A, over Honey Creek, 0.227 mi. St. Rte. 71, Clark Co., **$78,425** est. $86,500***to R. W. Wander, Danville, stabilized-bit. road mix, constructing steel beam bridge with concrete deck and substructure 0.426 mi. State Rt. 327, Hocking Co. **$58,785** est. $63,200.

To Purdy Constr. Co., Mansfield, c. conc., constructing continuous steel beam bridge with concrete deck and concrete substructure, Bridge LI-62-185, over North Fork of Licking River, 1.154 mi. U. S. Rte. 62, Licking Co., **$263,675** est. $279,700***to D. S. Cisle, 808 First Natl. Bldg., Hamilton, b. conc., constructing continuous steel beam bridge with concrete deck pier and existing abutments extended and capped with concrete 0.198 mi. St. Rt. 121, Preble Co., **$67,883** est. $71,300***to Crawford Constr. Co. Inc., 640 N. Union St., Galion, macad.-b. conc., constructing continuous concrete slab bridge with conocrete substructure, Bridge AS-60-114, over Oldtown Creek, 0.151 mi. Ashland Co., **$51,397** est. $56,900***to W. J. Seidensticker Co., 209 S. High St., Columbus, b. conc., constructing continuous steel beam bridge with concrete deck and substructure, Bridge PI-23-37 over Scippa Creek, 0.123 mi. U. S. Rt. 23, Pickaway Co., **$97,977** est. $110,800***to Herkner Constr. Co., 5450 Hamilton Ave., Cleveland, macad.-bit. macad. 5.263 mi. U. S. Rte. 422, Trumbull Co., **$535,746** est. $579,400. Grand total $6,734,130. Bids 12/21, awarded.

Oklahoma—State Hy. Dpt., Oklahoma City, bit. 4.478 mi. Roger Mills Co., to Oklahoma Bituminous Co., Chickasha, **$53,629** est. $52,475***bit. 7.797 mi. Rogers Co., to D. T. Allen, Henryetta, **$51,931,** est. $57,863***bit. 1.38 mi. Cleveland Co., to Myron Grosecløse, 4000 N. W. 39 St., Oklahoma City, **$55,803** est. $65,140***bit. 1.986 mi. Oklahoma Co. and 5.402 mi. Dewey Co. to W. E. Steelman, 2800 N. E. 4 St., Oklahoma City, **$52,718** est. $52,983 and **$113,689** est. $118,641 respectively. Grand total $327,770. CD 12/27.

Okla., Oklahoma City—City, c. conc. in Dist. 1092 to M. A. Swatek & Co., Hightower Bldg., **$56,066.** Est. $57,700. Awarded 12/29 H. E. Chase, city engr. CD 10/29/45—ENR 11/15/45.

Tex., Houston—Brace & Carruth, 1087 W. 41 St., asph. Gardenia, LaMonte, Althea, Chippendale, Wakefield, Woodcrest Sts., in Oak Forest sub-division, own forces, **$110,000.**

Tex., Houston—Home Owned Properties, Scanlan Bldg., asph. Westhaven Estates off Westheimer Rd. to G. E. Hart, 7913 Scott St., Approx. **$70,000.** Edward G. Pearson, 3212 Smith St., engr.

Tex., Houston — Wyatt C. Hedrick, 5201 Fannin St., street constr. and asph. O. S. T. Rd. near S. Main St., own forces **$55,009.**

Tex., Waco — McLennan Co., Courthouse, road imprvs., incl. resurf., drainage southern and eastern part of county, **$78,000;** resurf. McGregor Hy., **$60,000,** own forces. CD 8/28/47—ENR 9/18/47.

Tex., Weimar — Colorado Co., Courthouse, grav., culverts, Precinct 3, **$65,000;** Precinct 4, **$85,000,** own forces. CD 7/17/47—ENR 8/7/47.

Man., Winnipeg — Municipality, c. conc. Williams St., Pacific and Ross Ave., **$92,305;** and Pembina Hy., incl. drainage sewers, **$162,400,** own forces. W. D. Hurst, city engr. CD 4/24/47—ENR 5/15/47.

EARTHWORK, WATERWAYS

BIDS ASKED

After January 7

†Washington—Bureau Reclamation, Dpt. Interior, Bldg. 1-A, Denver Federal Center, Denver, Colo., earthwork, concrete lining and structures for approx. 14 mi. West Canal, Columbia Basin Project, near Ephrata.

After January 14

†Washington—Bureau Reclamation, Dpt. Interior, Bldg. 1-A, Denver Federal Center, Denver, Colo., constructing North Dam, an earthfill structure 94 ft. high, above stream bed and 1,350 ft. long, dam to form north barrier of Grand Coulee equalizing reservoir, earthwork, concrete lining and structure for approx. 1.5 mi. of 16,000 cfs. capacity Feeder canal, relocating 1¼ mi. standard gage construction railroad, Columbia Basin Proj., near Coulee Dam.

January 20

†Missouri—U. S. Eng., 826 U. S. Court House & Custom House, St. Louis, Zone 1, repairing Harris Private Levee, Pike Co., Serial No. Eng. 23-065-49-103.

January 25

†Montana — Bureau Reclamation, Dpt. Interior, Bldg. 1A Denver Federal Center, Denver, Colo., structural steel crane catwalk for Hungry Horse Power Plant, Hungry Horse Proj., Spec. 2522. Plans deposit $1. L. N. McClellan, ch. engr.

†Virginia—U. S. Eng., foot of Front St., Norfolk, maintenance dredging, 1,087,880 cu. yd. shoals below Hopewell, James River, Inv. Serial No. Eng-44-110-49-132. CD 6/9/44—ENR 6/29/44.

†Washington—Bureau Reclamation, Dpt. Interior, Bldg. 1-A, Denver Federal Center, Denver, Colo., furnishing, del. f.o.b. cars shipping point or f.o.b. cars Odair, misc. structural steel, rails, rail accessories and crane catwalk for Grand Coulee Pumping Plant, Columbia Basin Proj., Spec. 2521.

†Washington—Bureau Reclamation, Dpt. Interior, Coulee Dam, earthwork, lining, pipelines, structures for Burbank pump laterals, Area B1, Columbia Basin Proj., Spec. R1-CB-13 (Region 1).

After January 25

†Washington—Bureau Reclamation, Dpt. Interior, Bldg. 1-A, Denver Federal Center, Denver, Colo., earthwork, concrete lining and structures for 14.5 mi. East Low Canal, and earthwork and structures for 6¾ mi. Rocky Coulee Wasteway, near Moses Lake.

LOW BIDDERS

●†California—Bureau Reclamation, Dpt. Interior, Redding, Dec. 29, earthwork, structures, track, telephone line for Shasta Dam branch line railroad relocation, Middle Creek to Matheson and earthwork, structures, surfacing for Shasta-County road relocations, Keswick Reservoir, Central Valley Proj., Spec. 2477, from R. A. Hezintz, 8101 NE Union St., Portland, Ore., **$1,744,620.** (**Correction**—low bidder.) CD 1/4—ENR 1/13, under LB.

†North Dakota—U. S. Eng., Box 300, Fort Lincoln, Bismarck, Dec. 21, clearing portion spillway area and lignite storage near Riverdale, Eng-32-015-49-51, from Bill Curphy Co., 448 Insurance Exchange Bldg., Des Moines, Ia., **$37,500.** CD 12/8—ENR 12/16, under LB.

CONTRACTS AWARDED

Mass., Falmouth—Commonwealth of Mass., Dpt. P. Wks., 100 Nashua St., Boston, shore protection, Falmouth Heights, to Frederic V. Lawrence, Inc., Gifford St., **$34,175.** CD 1/4—ENR 1/13, under LB.

Alta., Spring Coulee—Dominion Govt., Ottawa, Ont., tunnel to Assiniboia Eng. Co. Ltd., 300 Leeson St., Lineham. Est. over **$300,000.** CD 9/8—ENR 9/16.

AIRPORTS AND AIRBASES

BIDS ASKED

January 18

Mass., East Boston—ELECTRICAL SERVICES—Commonwealth of Mass., P. Wks. Dpt., 100 Nashua St., Boston, electrical services, Terminal Facilities, Logan Airport. Over $50,000. Plans deposit $5. P. H. Kittfield, c/o owner, ch. engr. CD 4/13—ENR 4/29.

January 24

†La., Baton Rouge—INSTRUMENT LANDING SYSTEM—Civil Aeronautics Admin., Dpt. Commerce, P. O. Box 1689 Ft. Worth, Tex., instrument landing sys. Over $75,000.

January 25

Va., Richmond—AIRPORT—At office J. W. Huffman, city purch. agt., Mosque Bldg., Laurel and Main Sts., transfer control of air field lighting sys. from present control tower to new control tower in Administration Bldg. (now under construction). Plans deposit $5; grading area adjacent to Administration Bldg., concrete arpon, concrete sidewalk, oil gravel roadway and parking areas, concrete curb, storm sewer manholes and catch basins, concrete roadways. Plans deposit $10, both at Richard E. Byrd Flying Field. CD 10/7/43—ENR 10/14/43.

LOW BIDDERS

Tex., Jasper—AIRPORT—Jasper Co., A. Turner, judge, Dec. 30, airport, landing strip and runway, from Rex D. Kitchens Constr.

Co. and J. R. Canion Constr. Co., 608 W. Monroe St., Austin, **$100,351.** est. $174,800. CD 12/21—ENR 12/23.

PUBLIC BUILDINGS

BIDS ASKED

After January 12

†**Wyoming**—Bureau Reclamation, Dpt. Interior, Bldg. 1-A, Denver Federal Center, Denver, Colo., Medicine Bow substation. 4,000 kva capacity, from 115 kv to 34.5 kv and 2.4 kv., incl. constructing concrete footings, furnishing, erecting, chain-link fence, erecting steel towers, installing electrical equip., furnishing, placing gravel surface, Medicine Bow.

January 18

†**S. C., Folly Island**—Office of the Commander, 7th Coast Guard Dist., P. O. Box 378, Miami 33, Fla., Loran Signal Bldg. and accessories at Coast Guard Loran Station.

January 19

●**Ga., Savannah**—Chatham Co. Bd. Educ., Savannah, negro high school, $1,000,000. Extended date. CD 12/22—ENR 12/30.

†**S. C., Beaufort**—Construction Officer, Charleston Naval Shipyard, P. O. Box 365, Naval Base, three 1 story frame dwellings at Naval Hospital.

January 20

D. C., Wash.—Distr. Comrs., District Bldg., four apartment bldgs., Tuberculosis Sanatoria near Glenn Dale, Md. Plans deposit $20.

January 21

†**California**—Bureau Reclamation, Dpt. Interior, Box 307, Elberta, complete Clayton Canal Pumping Plant and Ignacio Canal Pumping Plant, Spec. R2-44.

La., Natchitoches — City, Frank McKees, mayor, City Hall rein.-con., brick power plant $75,000. Freese & Nichols, 407 Danciger Bldg., Ft. Worth, Tex., engrs.

New York—Bd. Transportation, 250 Hudson St., New York, Zone 13, furnishing, erecting structural steel for Castleton Avenue Bus Garage, Castleton and Jewett Aves. Contr. MW-104-2, Richmond Boro.

N. Y., Brooklyn—Bd. Transportation, 250 Hudson St., New York, Zone 13, constructing Livonia, Sheepshead and Nostrand substations for New York City Transit Sys.

January 25

Ala., Montgomery — Alabama Education Assn., c/o Pearson & Tittle, archts., First National Bank Bldg., Montgomery, office.

Calif., Burbank—City, 116 W. Magnolia St., main piping for steam plant, 20,000 kw. installation only. $75,000. Plans deposit $25. J. H. McCambridge, supt. Power and Light. CD 1/5/45—ENR 1/25/45.

Calif., San Jose—San Jose Unified School Dist., San Jose, rein.-con. gymnasium and locker bldg. at Abraham Lincoln High School. $332,000. Plans deposit $25. Binder & Curtis, Ralph Wychoff & Edward W. Kress, First National Bank Bldg., San Jose, archts. CD 7/29—ENR 8/19.

Minn., Fergus Falls—State Dpt. Admin., P. T. Peterson, dir Purchases, 19 State Capitol, St. Paul, mens geriatric bldg. $500,000. Plans deposit $30. Toltz, King & Day, 1509 Pioneer Bldg., St. Paul, archts. CD 11/21/46—ENR 12/12/46.

†**Mo., St. Louis**—U. S. Atomic Energy Comn., New York Operations Office, St. Louis Area, 65 Destrehan St., Zone 7, 1 and 2 story, 110x232 ft. masonry, steel factory for Plant 6, 65 Destrehan St., incl. 2 railroad sidings, sub station addn., overhead power lines, etc. Extended date. Singmaster & Breyer, 65 Destrehan St., Zone 7, archts. CD 11/24—ENR 12/2.

†**N. Y., Brooklyn** — Pub. Wks. Office, Bldg. 77, Naval Shipyard, Bldg. 291 addn. Lockwood Greene Engineers, 10 Rockefeller Plaza, New York, Zone 20, engrs.

After January 25

†**Wyoming**—Bureau Reclamation, Dpt. Interior, Bldg. 1-A, Denver Federal Center, Denver, Colo., completing Kortes Power Plant and switchyard, installing three 18,500 hp. turbines; three 50,000 ft. lb. governors and three 13,333 kva. generators, erecting 5 steel transmission towers and stringing conductors for approx. 1 mi. transmission line, Missouri River Basin and Kendrick Projs.

January 26

W. Va., Institute—State Bd. Educ., Capitol Bldg., Charleston, part 2 and part 3 story, 73x95 ft. center portion, 34x156 ft. wings on each side, rein.-con. brick, limestone library. $600,000. Plans deposit $100. Tucker-Silling, Masonic Temple Bldg., Charleston, engrs. and archts.

January 27

N. Y., Rockaway—New York City Housing Auth., 63 Park Row, New York, Zone 7, foundations, appurtenances for Arverne Houses, Proj. NYC-18 in area bounded by Rockaway Beach Blvd., Arverne Blvd., Beach 56 St., Beach Channel Dr. and Beach 65 St. Plans deposit $75. CD 1/5/45—ENR 1/25/45.

February 1

N. Y., New York—New York City Housing Auth., 63 Park Row, Zone 7, general construction, heating and ventilating, electrical work, and plumbing for Gun Hill Houses, Proj. NYC-9, in area bounded by Holland Ave., Gun Hill and White Plains Rds., Magenta St., Cruger Ave. and a line south of and parallel with Magenta St., Bronx Boro. Plans deposit $75. Extended date. CD 12/16—ENR 12/23.

February 2

●**Calif., San Jose**—San Jose Unified School Dist., 408 Alamaden Ave., group 14 bldg. units, some rein.-con., some frame for Willow Glen Junior and Senior High Schools, $1,700,000. Plans deposit $250. Marsh, Smith & Powell, 208 W. 8 St., Los Angeles, archts. CD 4/13—ENR 4/29.

February 7

●**Conn., New Britain** — City, H. F. Fox, chn. New Britain Housing Authority, 125, two story, bsmnt., brick, frame garden apartments, Housing MR-12, Corbin Ave., $1,750,000. Plans deposit $50, refundable. Thomas Worcester, Inc., 84 State St., archt.

February 8

●**Ala., Birmingham**—City, City Hall, city hall. $2,500,000. Extended date. Charles H. McCauley, Jackson Bldg., archt. CD 10/19—ENR 10/21.

February 10

●**Calif., Berkeley**—Regents University of California Berkeley, 4 story, 100,000 sq. ft., rein.-con. engineering bldg., University of California Campus, $1,600,000. Plans deposit $50. Will G. Corlett & Arthur W. Anderson, Bank of America Bldg., Oakland, archts. CD 10/5/44—ENR 10/19/44.

February 11

Mass., Cohassett—Town, School Dpt., Town Hall, high school, $900,000. Plans deposit $50. Edgar T. P. Walder, 131 State St., Boston, archt. Nichols & Sibley, 7 S. Main St., West Hartford, consult. archts.

February 19

Wis., Merrill—Bd. Educ., Merrill, 1, 2 and 3 story high school $800,000-$900,000. Plans deposit $25. E. A. Stubenrauch, 708 Erie Ave., Sheboygan, archt. CD 4/29—ENR 5/13.

About February 20

●**Ill., Kankakee**—Bd. Educ., Ed. P. Madison, secy., Kankakee, 2 story, brick, concrete, steel West Junior High School, and 2 story, brick, concrete, steel East Junior High School. $1,000,000. Bids Nov. 22 rejected. Childs & Smith, 20 N. Wacker Dr., Chicago, archts. CD 11/5—ENR 11/11.

LOW BIDDERS

†**Arizona and Nevada**—Bureau Reclamation, Dpt. Interior, Bldg. 1-A, Denver Federal Center, Denver, Colo., rejected bids July 8, Schedules 1, 3, 4, 5, 6 and 7, furnishing f.o.b. cars at Prescott, Ariz., transformers, misc. switches and electrical equip., Prescott Substation, Davis Dam Project, Spec. 2261, L. B. Approx. **$250,000.** CD 5/26—ENR 5/27.

Del., Newark—Newark Del. School Bd., Dec. 8, school, from Rupert Constr. Co., 3400 Lancaster Ave., Wilmington, **$460,377.** CD 11/16—ENR 11/18.

D. C., Wash.—District Govt., District Bldg., Jan. 4, 3 story 24 classroom Walker-Jones Elementary School, 1 and L Sts., N.W., from E. L. Daniels, 2112 N. Quincy St., Arlington, Va., **$642,632.** CD 12/30.

Fla., Tallahassee—State Bd. Control, Tallahassee, Dec. 31, men's residence halls at Florida A. & M. College, from Beers Constr. Co., 70 Ellis St. N. E., Atlanta, Ga., **$408,745.** CD 12/8—ENR 12/16.

Mass., Monson—Commonwealth of Mass., Dpt. Mental Health, 100 Nashua St., Boston, Dec. 30, young children's bldg. Monson State Hospital, P-M24, Contr. 1, from Beaudry Constr. Co., 142 Hancock St., Springfield, **$543,636.** CD 12/21—ENR 12/23.

N. Y., Brooklyn—Bd. Transportation, 250 Hudson St., New York, Zone 13, Contr. 9, electrical work for East New York Bus Depot, from Jandous Electric Constr. Corp. and Hoffman & Elias, Inc., 254 W. 31 St., New York, Zone 1, **$898,618.** CD 9/18/46—ENR 10/3/46.

N. Y., New York—Port of New York Auth., 111 Eighth Ave., Zone 11, excavation for Union Bus Terminal between 8 and 9 Aves. and 40 and 41 Sts., from Howard Collins Constr. Co., 147 W. 42 St., Zone 18, **$624,315.** CD 2/4/47—ENR 2/20/47.

●**N. Y., West New Brighton**—New York City Housing Auth., 63 Park Row, New York, Zone 7, Jan. 6, general contract Todt Hill Houses, from William A. Berbusse, Jr., Inc., 101 Park Ave., New York, Zone 17, **(A) $3,372,900, (B) $3,382,900*****heating and ventilating, from Harry Starkman & Bros., 348 Brook Ave., New York, Zone 54, **$442,937*****plumbing, from J. L. Murphy, Inc., 340 E. 44 St., New York, Zone 17, **$472,300.** CD 12/15—ENR 12/23.

●**B. C., Vancouver**—Vancouver General Hospital, 10 Ave. and Heather St., Dec. 15, (1st unit) 9 story, bsmnt., 36x200 ft. rein.-con. stone, cement nurses residence, Heather St., from Marwell Constr. Co. Ltd., 410 Seymour St. Approx. **$1,088,326.** CD 12/3—ENR 12/9.

CONTRACTS AWARDED

Fla., West Palm Beach—Palm Beach Co., West Palm Beach, Boynton Beach-Delray Beach Consolidated High School, to J. Hilbert Sapp, West Palm Beach, **$150,459.** Bids 12/28.

●**Ill., Harvey**—Thornton Twp. School Dist. 205, 1 story, bsmnt., brick, stone, concrete gymnasium, to Charles B. Johnson & Son, Inc., 6 N. Michigan Ave., Chicago. Est. **$1,187,000.** Burnham & Hammond, 53 W. Jackson St., Chicago, archts.

Mich., Detroit—City, Bd. Educ., 1354 Broadway, (2nd unit) 3 story, 80x85 ft., bsmnt., rein.-con., brick Wayne University addn., to engineering unit, to A. W. Kutsche & Co., 2924 W. Grand Blvd., **$870,761.** Bids 12/23, awarded 12/28. CD 12/3—ENR 12/9.

N. M., Albuquerque—U. S. Eng., P. O. Box 1538, Jobs 1 and 2, Barracks Group III, Sandia Base, Eng-29-005-49-29, to Robert E. McKee, P. O. Drawer 562, El Paso, **$1,572,600.** Bids 12/21. CD 1/5—ENR 1/13, under LB.

N. Y., New York—Supt. School Bldgs., Design & Constr., 49 Flatbush Ave. exten., Brooklyn, Zone 1, general contract P. S. 124 Addn., Tinton and Forest Aves., Bronx Boro, to Gotham Constr. Corp., 285 Madison Ave., Zone 17, **$723,550.** Bids 11/3. CD 12/1—ENR 12/9, under LB.

Tex., Winnie and Stowell — Winnie-Stowell Independent School Dist., c/o H. L. Wheat, Stowell, brick school, concrete slab fdn. and frame, near here to H. B. Neild, Calder Heights, Beaumont, **$250,000.** Emory S. White, M & M Bldg., Houston, archt. CD 11/18—ENR 12/23.

COMMERCIAL BUILDINGS

BIDS ASKED

January 19

Mass., Greenfield—Community Y. M. C. A., 449 Main St., physical plant, community Y.M.C.A. $400,000. Extended date. James A. Britton, 20 Federal St., archt. CD 12/1—ENR 12/9.

January 20

Ky., Louisville—Broadway Baptist Church, Shelbyville Rd. at Chenoweth Lane, church and Sunday school. $260,000. Extended date. Nevin & Morgan, Starks Bldg., archts. CD 12/1—ENR 12/9.

January 25

●**Mass., Cambridge**—Harvard University, E. Reynolds, vice pres., Cambridge, 2 and 3 story single, duplex Botanic Garden Apartments, Linnacan and Raymond Sts. $1,700,000. Des Granges & Steffian, 161 Devonshire St., Boston, archts. Cleverdon, Varney & Pike, 120 Tremont St., Boston, engrs. CD 10/21—ENR 11/4.

Bids Asked

●**N. J., Jersey City** — Prudential Insurance Co., 763 Broad St., Newark, 653-unit garden apartments, 9 three story bldgs. on 22 acre site bounded by Westside Ave., Boardman Parkway and Audubon Ave. $4,000,000. Kelly & Gruzen, 921 Bergen Ave., archts. CD 9/25/47—ENR 10/9/47.

SOON LETS CONTRACT

Ill., Chicago—Montgomery Ward & Co., 619 W. Chicago Ave., soon lets contract 4 story, 160x400 ft., rein.-con., brick mail order bldg. addn. R. Rowe, c/o owner, archt.

Va., Richmond — Seventh Street Christian Church, c/o Baskervill & Son, archts., 2202 Central Natl. Bank Bldg., soon lets contract sanctuary. Approx. $500,000.

LOW BIDDERS

Calif., Palo Alto—Peninsula Housing Assn., Box 258, Dec. 30, twenty-nine 2 story, wood frame residences on Ladera Portola Rd., from Borro & Nichols, 189 Oak Court, **$469,516.** CD 12/21—ENR 12/30.

Ore., Salem—First Christian Church, High and Center Sts., rejected bids Dec. 15, church, L. B. **$388,495.** Will re-advertise. CD 1/5—ENR 1/13, under LB.

Pa., Huntingdon—Juniata College, Huntingdon, rejected bids Sept. 8, dining hall and college union bldg. Over **$250,000.** CD 8/27—ENR 9/2.

Tex., Houston — Trinity Episcopal Church, Main and Holman Sts., rejected bids May 27, church. **$300,000.** CD 4/30—ENR 5/6.

CONTRACTS AWARDED

●**Calif., Long Beach**—Lambert Housing Corp., 3407 San Fernando Rd., Los Angeles, 187 frame, stucco dwellings, Newport and Willow Sts., to Myers Bros., 3407 San Fernando Rd. Est. **$1,000,000.** Heath Wharton, 672 S. LaFayette Park Pl., Los Angeles, archt.

Fla., Coral Gables—Owner, c/o Baxter & Baxter, archts., 121 SE 1 St., Miami, apartment known as University Park, fronting South Dixie Hy., to Babcock-Lamont Co., 3014 Coral Way, Miami. Est. over **$500,000.**

Mo., St. Louis—Travelers Insurance Co., 700 Main St., Hartford, Conn., and c/o Clarence M. Turley, Inc., mgr., 1304 Ambassador Bldg., 411 N. 7 St., St. Louis, Zone 1, rehabilitation 8 story, bsmnt. commercial bldg. and store, 6 and Olive Sts., to G. L. Tarlton Contg. Co., 5505 Dale Ave., Zone 9. Est. approx. **$650,000.** Wm. C. E. Becker, Ambassador Bldg., 411 N. 7 St., Zone 1, engr. CD 10/13—ENR 10/21.

N. J., Mt. Holly — Thomas Edwards, c/o Dante D'Anastasio, archt., 2010 Horner Ave., Pennsauken, apartment development, separate contracts. Over **$750,000.**

Pa., Lancaster—F. W. Woolworth Co., 123 S. Broad St., Phila., store and office, to Turner Constr. Co., 1500 Walnut St., Phila. **$400,000.** CD 12/30—ENR 1/6, under CA.

●**Pa., Lansdale**—Owner c/o general contractor, 189 residences, to Ike Heckler Jr., Funk Rd., **$1,890,000.**

●**Pa., Phila.**—Frank Kiely, 611 Arbutus Ave., residential development, Stenton Ave. and

Durham St., separate contracts. **$1,060,000.** Christian H. Fries, 3701 N. Broad St., archt.

●**Pa., Phila.**—McCloskey & Co., 16 and Thompson Sts., 300 residences, Academy Gardens; separate contracts. **$3,000,000.**

Pa., Phila.—Quaker Constr. Co., 2080 Land Title Bldg., Broad and Chestnut Sts., 44 residences, Church Rd., separate contracts. **$616,000.**

●**Pa., Whitpain Twp. (Skippack P. O.)**—Mecco Constr. Co., 520 W. Mt. Pleasant Ave., Phila., residential development, Skippack and Butler Pikes, separate contracts. **$1,500,000.**

Tenn., Memphis—Poplar Apartments, Inc., c/o Polk Agee, archt., Sterick Bldg., 40 apartment units. Owner builds. Over **$300,000.**

Tenn., Nashville—J. E. Crain Contg. Co., 302 42 Ave. N., 36 apartment units, force account. **$400,000.** CD 12/31.

Tex., Abilene—Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, masonry, concrete, steel office addn. to McKenzie Constr. Co., Transit Tower, San Antonio. Approx. **$270,000.**

●**Tex., Dallas**—W. W. Caruth, Jr., 5803 Greenville St., shopping center enlargement, own forces, **$750,000,** CD 2/19—ENR 3/4; shopping center enlargement, Lovers Lane and Inwood Rd., to J. Lawrence Jones, 406 W. Clarendon St., **$300,000,** CD 3/2—ENR 3/11. Walter W. Ahlschlager, 212 S. St. Paul St., archt.

Tex., Dallas—Edward T. Decker, 101 Laurel Land Rd., 125 dwellings, Beckley Heights. Owner builds. **$125,000.** CD 6/21—ENR 7/8.

●**Tex., Dallas**—Mercantile National Bank, 106 S. Ervay St., 7 story, 200,000 sq. ft. brick office, repair shop, parking garage, concrete frame and fdn., air-conditioning, to Vilbig Bros., 2026 Singleton Blvd., Approx. **$1,550,000.** Awarded 1/1. Walter W. Ahlschlager, 212 S. St. Paul St., archt.

Tex., Houston—Pickwick-Plaza Apartments, Inc., McGregor Way, apartment units, own forces. **$500,000.** CD 4/13—ENR 4/29.

●**Tex., Houston**—Reed & Yancey Constr. Co., 3802 Richmond Rd., 45 dwellings, own forces. Approx. **$1,000,000.** CD 1/6.

Tex., Houston—Town and Country Apartments, 5125 Hillman St., masonry apartment units, south of McGregor Way and east of Almeda Rd., own forces. **$790,000.**

INDUSTRIAL BUILDINGS

BIDS ASKED

January 20

N. M., Corona — PLANT — Central New Mexico Electric Co-operative, Corona, electric wiring and substation equip.; misc. piping and mechanical equip. for electric generating plant. Plans deposit .$5 each. Beavers & Lodal, 1408 Transit Tower, San Antonio, Tex., engrs. CD 1/5—ENR 1/13, under LB.

Bids Asked

N. J., Hammonton — WAREHOUSE — John Capelli, 100 West End Ave., warehouse. $68,000. W. D. Faint & Co., 1915 Browning Rd., Pennsauken, engr.

Tex. Houston — WAREHOUSE — Select Wines Co., Inc., 1116 Hemphill St., warehouse. $75,000

●**Tex., Houston**—OPEN HEARTH FURNACE—Sheffield Steel Corp., Industrial Rd., open hearth furnace, $1,250,000; open hearth furnace and coolers, $1,000,000. CD 8/21/46—ENR 9/19/46.

SOON LETS CONTRACT

Fla., Zellwood—PLANT—Seaboard Air Line R. R. Co., W. D. Simpson, ch. engr., S. A. L. R. R. Bldg., Norfolk, 10, Va., soon lets contract precooling plant, water sys., roadways and earthwork.

●**Ga., Atlanta** — PLANT — Chrysler Corp., c/o Robert & Co., archts., 96 Poplar St. N.W., soon lets contract parts mfg. plant addn., $1,000,000. CD 12/10—ENR 12/23.

Pa., Phila.—AUTO SERVICE—Becker-Mills Co., 4115-63 Frankford Ave., Phila., Pa., soon lets contract, 2 story, steel, concrete auto service bldg. $150,000. Manuel A. Greenberg, 1701 Erlen Rd., LaMott-(Phila. 26,) Pa., engr. CD 12/9—ENR 12/16.

Tex., Dallas — WAREHOUSE — Cohen Candy Co., 2022 Commerce St., soon lets contract masonry warehouse, concrete slab fdn. $70,000. Max M. Sandfield, 2907 Maple St., engr. CD 12/14—ENR 12/16.

Tex., Galveston — SALES and SERVICE — Happy Alexander, 25 and H Ave., soon lets contract auto sales, display, service, concrete fdn.; air-conditioning. $75,000. M. J. Sullivan & Charles F. Sullivan, 3901 Travis St., Houston, archts.

LOW BIDDERS

Fla., Miami — SALES and SERVICE — Trail Pontaic Inc. c/o Leroy K. Albert, archt., Coral Gables, auto sales and service bldg., from Chalker Constr. Co., 343 S.W. North River Dr. Est. **$68,000.** CD 12/27—ENR 12/30.

Miss., Jackson — WAREHOUSE, etc. — Owner, c/o N. W. Overstreet & Assoc., archts., 201 N. Lamar St., Dec. 30, warehouse and office, from Flint Bros. Constr. Co., Deposit Guaranty Bank Bldg., Jackson, **$75,319.** CD 12/16—ENR 12/23, under Commercial Bldgs.

CONTRACTS AWARDED

Calif., Los Angeles — PLANT — John Morrell & Co., 1335 Willow St., one and part 2 story, rein.-con. meat packing plant, to T-S. Constr. Eng., Inc., 530 W. 6 St., **$185,000.** Est.

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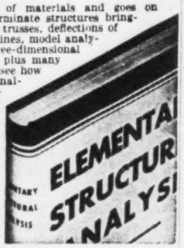

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$140,000. Bids 11/9, awarded 1/3. H. R. Kelley, 3723-A. Wilshire Blvd., archt.

Ga., Atlanta — GARAGE — M. Rich & Bros., Inc., c/o Stevens & Wilkinson, archts., 157 Luckie St. N. W., auto parking garage, to Mion Constr. Co., 377 Techwood Dr. Est. **$500,000.**

Ga., Atlanta — FREIGHT DEPOT — Seaboard Airline R.R., W. D. Simpson, ch. engr., S.A.L.R.R. Bldg., Norfolk 10, Va., freight depot, to The Flagler Co., 305 Techwood Dr. Est. over **$75,000.** CD 11/29.

Ill., Chicago — PLANT — Ansell Simplex Ticket Co., 2844 W. Chicago Ave., 1 story, brick, steel plant, to Freevol Smedberg & Co., 5807 W. Chicago Ave. Est. **$70,000.** Walton & Kegler, Evanston, archts.

Ill., Chicago — WAREHOUSE, etc. — Hertz Drive-Ur-Self, Div. General Motors, General Motors Bldg., Detroit, Mich., 1 story, 175x180 ft. warehouse and garage, to Ragnar Benson, Inc., 4744 W. Rice St.

Ia., Bloomfield—POWER PLANT—Southern Iowa Electric Co-operative, Bloomfield, bldg. addns., equip. power plant, Unit 2, to R. V. Leary Co., Securities Bldg., Des Moines, **$129,875.** Bids 12/14. CD 11/30—ENR 12/2, under Unclassified.

●**Ky., Junction City**—PLANT—Kraemer Veneer Plant, c/o Ross Kraemer, Junction City, plant to replace Burnside Veneer Plant, separate contracts. **$1,500,000.** L. V. Abott, 2323 S. Brook St., Louisville, archt.

Missouri — PUMPHOUSES — Shell Pipeline Co., Cushing, Okla., pumphouses at Diamond, Buffalo and Bland, to Johnson Constr. Co., Phelps Grove, **$500,000.**

Mo., St. Louis — PLANT — Anheuser-Busch Inc., 721 Pestalozzi St., Zone 18, imprv., altering bottling plant, 3053 S. Broadway, to A. H. Strathmann, 27 Fox Meadows, St. Louis County, Est. approx. **$100,000.** Bids 1/18. CD 12/23—ENR 1/6.

Mo., St. Louis — SALES and SERVICE — C. Brown & M. Christian c/o contractor, 1 story, 82x122 ft., brick, concrete sales and construction equip service bldg., 5081 Manchester Ave., to L. O. Stoker Co., 1673 Arcade Bldg., 812 Olive St., Zone 1, Est. over **$68,000.** Edward J. Lawler, 1673 Arcade Bldg., 812 Olive St., Zone 1, archt.

Mo., St. Louis — SALES and SERVICE — Wiese Planning & Engineering Co., 1735 S. Vandeventer St., Zone 10, 1 story, 40x125 ft., concrete block sales and service. Owner builds. Julius E. Tarling, 2807 N. Grand Blvd., Zone 7, archt.

Pa., Sellersville — FACTORY, etc. — Schulmerich Electronics, Inc., c/o Frank M. Bates Assoc., engrs., N. Radcliffe St., Bristol, 1 story, 5,600 sq. ft. concrete block factory and office, to Ike Heckler, Jr., Funk Rd., Lansdale, **$200,000.** CD 4/28—ENR 5/6, under Commercial Buildings.

Pa., Phila. — WAREHOUSE, etc. — Sinclair Refining Co., 10 W. 51 St., New York, N. Y., 1 story, 93x99 ft., brick warehouse, and 1 story, 150x200 ft. garage and machine shop, to James J. Clearkin, 4450 Leiper St. **$170,000.** Bids 12/10. CD 12/9—ENR 12/16.

Tex., Houston — WAREHOUSE—Hugh G. Henderson Co., 2202 McKinney St., 20,600 sq. ft. structural steel frame warehouse, concrete slab fdn., to Schneider Constr. Co., 3004 W. Dallas St. **$150,000.** Bids 10/28. CD 10/26—ENR 10/28.

Tex., Houston—WAREHOUSE, etc.—Humble Oil & Refining Co., Humble Bldg., warehouse, bulk station, shop, addnl. misc. bldgs., paving, utility lines, etc., to Texas Gulf Constr. Co., 2008 S. Wayside St., **$318,000.** Bids 11/26. CD 12/20—ENR 12/23, under LB.

UNCLASSIFIED

BIDS ASKED

January 19

La., Baton Rouge—SWIMMING POOL, etc.—Park Comn., East Baton Rouge Parish, 115 St. Louis St., swimming pool, bathhouse, concession stand, Brooks Park; furnishing, del. f.o.b. cars Baton Rouge, water treatment, re-circulating equip. for swimming pool. Plans deposit $10 each. J. Roy Haase, 655 Laurel St., archt. CD 3/22—ENR 4/1.

Missouri—RURAL DISTRIBUTION LINES—Cuivre River Electric Co-operative, Troy, labor, 271.041 mi. rural distr. lines, Lincoln, St. Charles and Warren Counties, Proj. Missouri 57AB Lincoln, Sect. IV. Plans deposit $25. Drazen & Assoc., 8135 Forsythe Blvd., Clayton, St. Louis, Zone 5, engrs. CD 1/4.

January 24

New Jersey—LIGHTING SYSTEM—At office Joseph K. Costello, secy. The Delaware River Joint Comn. Administration Bldg., Bridge Plaza, Camden, roadway lighting sys., Contract 2A. Plans deposit $10; adv. ENR 1/13. CD 11/4—ENR 11/11.

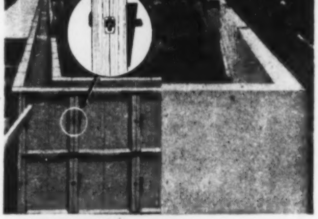
January 28

●**Ala., Montgomery**—LIVESTOCK COLISEUM—State Bldg. Comn., 702 Washington St., livestock coliseum for State Agricultural Dept. $1,500,000. Extended date. Sherlock, Smith & Adams, 301 Washington Ave., Montgomery, archts. CD 11/23—ENR 12/2.

LOW BIDDERS

Ala., Selma—STADIUM—City, Jan. 4, athletic stadium, from Cooper Brothers, Selma, **$219,266.** CD 12/8—ENR 12/16.

SYMONS FORMING SYSTEM



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SAVES COST

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La., New Orleans—SHED FRAMING—Port New Orleans, Canal St., Zone 2, Dec. 30, 365 tons structural steel framing for shed on Esplanade Ave. Wharf, Req. S. D. 4238, from Steel Constr. Co., Whitney Bank Bldg., **$83,220.** CD 12/17—ENR 12/23.

†**N. M., Albuquerque**—LAWN SPRINKLER SYSTEM—U. S. Eng., P. O. Box 1538, rejected bids about 12/14, lawn sprinkler sys. for Barracks Group I, Sandia Base, Inv. Eng.-29-005-49-37. CD 11/15—ENR 11/18.

Pa., Ashland—ELECTRICAL HAZARDS—Dpt. Property & Supplies, 18 and Herr Sts., Harrisburg, Jan. 5, electrical hazards at Ashland State Hospital, from A. Rockafeller Co., 6-8 S. Oak St., Mt. Carmel, **$68,000.** Est. $100,000. CD 12/7—ENR 12/16.

Tex., Nocona—SWIMMING POOL, etc.—Nocona Recreation, Inc., rein.-con. swimming pool and bathhouse from Clay King, 1719 Lincoln St., Fort Worth, **$66,030.** CD 11/22—ENR 12/2, under LB.

†**Tex., Orange**—SWIMMING POOL—8th Naval Dist. Officer in Charge, Bldg. 16, Naval Station, New Orleans, La., Dec. 21, Unit 1, 42x109 ft. rein.-con. swimming pool, Spec. 20024, from Tellepsen Constr. Co., 3900 Clay St., Houston, **$169,124** est. $110,000. CD 12/2—ENR 12/9.

Wash., Seattle—LIGHTING SYSTEM—University of Washington, Education Hall, Zone 4, Dec. 21, revision street lighting sys. on campus, from City Electric Co., 2014 3 Ave., Zone 1, **$63,535.** Est. $87,500. CD 12/7.

CONTRACTS AWARDED

Ala., Montgomery—LIVESTOCK COLISEUM SITE GRADING — State Bldg. Comn., 702 Washington Ave., grading site, livestock coliseum for State Agricultural Dpt., to Tupelo Constr. Co., c/o Sherlock, Smith & Adams, archts., 301 Washington Ave., **$66,800.** CD 11/23—ENR 12/2.

Fla., Ft. Lauderdale — BATH HOUSES — Medford Mineral Springs, Inc., c/o Robert G. Jahelka, archt. Ft. Lauderdale, mineral bath houses. Owner builds. **$200,000.** CD 12/13—ENR 12/23.

●**Ill., Chicago** — SUBWAY — City, Dpt. Purchases, Supplies, & Contracts, City Hall, Contr. D-8a, Dearborn St., Subway, to S. A. Healy Co. & Peter Kiewit, Dearborn and Van Buren Sts., **$1,608,177.** CD 10/14—ENR 10/21, under LB.

●†**Wyoming and Nebraska**—TRANSMISSION LINE—Bureau Reclamation, Casper, Wyo., Casper-Gering 115-kv transmission line, Missouri River Basin Proj., Spec. 2423, Schedule 1, aluminum conductor, to Smith Hi-Line Co., 1000 44 Ave. N., Nashville, Tenn., **$1,024,996.** Bids 11/9. CD 11/17—ENR 11/25, under LB.

CONSTRUCTION REPORTS—Third Section

WATER SUPPLY

BIDS ASKED

January 20

N. Y., New York—Comr. Water Supply, Gas & Electricity, Municipal Bldg., Zone 7, constructing, installing complete turbine driven pump. plants, suction and discharge mains, water treatment plants and connections between Croton Falls Reservoir and Shaft 11, Delaware Aqueduct, and between Cross River Reservoir and Shaft 13, Delaware Aqueduct, Westchester and Putnam Counties. Plans deposit $5. CD 12/1—ENR 12/9.

January 28

Tex., Childress — City, L. W. McClendon, Mayor, Baylor Creek Dam, near Lake Childress, at city water supply proj. $300,000. Plans deposit $25. D. T. M. Davis, P. O. Box 536, engr.

February 1

Tex., Lufkin—City, water plant expan. imprvs. $50,000. Plans deposit $20. Koch & Fowler, Gr Natl. Life Bldg., Dallas, engrs. CD 5/5, under LB.

February 2

Tex., Houston—City, M. H. Westerman, secy., water pump. station at Northeast Plant, Roland and Linn Sts. L. Fugate, c/o owner, engr. CD 10/30/44—ENR 7/13/44.

February 16

S. C., Newberry—City, Comr. P. Wks., W. R. Wise, mgr.-engr., Newberry, WW imprvs., 1 m. g.p.d. addn. to filter plant, incl. changes in existing filter plant and raw water pump. station. Plans deposit $25. Barber, Keele & Assoc., Inc., Columbia, engr.

LOW BIDDERS

Ore., Roseburg—Roberts Creek Water Dist. Route 1, Box 275, Jan. 3, water supply sys., from Henshaw Bros., 4006 N. E. Davis St., Portland, **$110,250** sans pipe; **$140,640** with pipe. CD 12/14—ENR 12/16.

Tex., Dallas—City, Earl Goforth, secy., Jan. 4 c.i. watermains, Young St., from Whittle Constr. Co., P. O. Box 5602, **$84,930.** CD 12/1—ENR 12/23.

CONTRACTS AWARDED

La., Chatham—Mayor, Chatham, WW. sys., to Roy M. Mitchell, Bossier Bank Bldg., Shreveport, **$27,989.** CD 12/28—ENR 1/6.

Ont., Trenton—Dominion Govt., Ottawa, watermains, to H. G. McFarlane & Co., 18 Elizabeth St., Picton, **$150,000.** Canadian Commercial Corp., 70 Lyon St., Ottawa, engrs.

Que., Crabtree Mills — Municipality, filter bldg., watermains, hydrants, to Joliette Constr. Co., Ltd., 624 Champlain St., **$120,000.** CD 12/3—ENR 12/9.

SEWERS, WASTE DISPOSAL

BIDS ASKED

January 20

N. Y., New York — President Manhattan Boro, Municipal Bldg., Zone 7, relief combined sewer in Bleecker St. from easterly side of Broadway to point approx. 46 ft. west of Broadway, etc. Plans dposit $25.

February 7

Calif., Oceanside—City, 706 Third St., 2½ m.g.d sewage disposal sys. $200,000. Plans deposit $25. Quinton Engineers Ltd., 816 S. Figueroa St., Los Angeles, engrs. CD 8/22/45.

February 8

Ill., Princeton—City, City Hall, storm and sanitary sewers. $182,000. Stanley Eng. Co., Hershey Bldg., Muscatine, Ia., engr.

February 9

Mass., Northbridge — Town, Bd. Sewer Comrs., sewage treatment plant imprvs., incl. trickling filter, clarifier, piping, appurtenances, pump. station alterations, $75,000. Plans deposit $10. Metcalf & Eddy, 1300 Statler Bldg., Boston, engrs.

February 16

S. C., Newberry — City, Comr. P. Wks., W. R. Wise, mgr-engr. Dr. H. B. Senn, chn., sewage treatment plant (rapid filter, separate settling sludge digestive type). Plans deposit $25, 42,540 ft. 8- to 15-in. sewers, 7,800 ft. 5 in. sewer service connections, 148 manholes. Plans deposit $20. Barber, Keele & Assoc., Inc., Columbia, engr. CD 7/26/46—ENR 8/8/46.

LOW BIDDERS

●**Calif., Los Angeles**—Bd. P. Wks., 153 City Hall, Jan. 5, power and light distr. sys. for Hyperion Activated Sludge Plant, El Segundo, from Newberry Electric Corp., 1038 Venice Bldg., **$1,174,172.** Est. $1,000,000. CD 12/13—ENR 12/16.

BRIDGES

BIDS ASKED

STATE HIGHWAY LETTINGS

January 18
Kansas
January 20
New Jersey
January 21
Kansas

January 25
Maryland
January 27
California
New Jersey

LOW BIDDERS

Calif., Los Angeles—Bd. P. Wks., 153 City Hall, Jan. 5, reconstructing 6 timber bridges at Shoup Ave., Saticoy St., Sherman Way, Woodlake Ave., Fallbrook Ave., Van Owen St., from N. M. Saliba, 4833 San Fernando Rd., **$77,496.** Est. over $50,000. CD 12/21—ENR 12/23.

Missouri—State Hy. Dpt., Jefferson City, Jan. 4, two 80 ft. one 70 ft. and one 60 ft. rein.-con. I-beam span bridge over Black Snake Creek and C. G. W. RR, road from Andrew Co. line to St. Joseph, Sta. 20 plus 96, Buchanan Co., from List & Weatherly Constr. Co., 231 W. 47 St., Kansas City, Mo., **$186,854.** CD 12/15—ENR 12/23.

CONTRACTS AWARDED

Maryland—State Rds. Comn., Baltimore, Western approach to Chesapeake Bay Bridge, Contr. CBB 6-1-87 Anne Arundel Co., to Nello L. Teer Co., Durham, N. C., **$197,397.** Bids 12/7. CD 12/14—ENR 12/16, under LB.

Maryland—State Rd. Comn., Baltimore, 64 ft. span steel I-beam bridge with rein.-con. substructure, treated timber piles over Cox Creek, and grading drainage, partial paving 2.18 mi. approaches Chesapeake Bay Bridge, Contr. CBB 5-1-87, Queen Annes Co., to C. J. Langenfelder & Son, Inc., 8427 Pulaski Hy., Baltimore, **$324,964.** CD 12/17—ENR 12/23, under LB.

Nebraska—State Dpt. Roads & Irrigation, Lincoln, culverts, 2 railroad subways, one combined highway and railroad subway, 2 highway bridges, c. conc. surf. FA-UG-3, Grand Island, to Bushman Constr. Co., 5 and Felix Sts., St. Joseph, Mo., **$973,111.** Bids 12/16. CD 12/30—ENR 1/6, under LB.

Washington — State Hy. Dpt., Olympia, rein.-con. overstructure over Union Pacific Ry. and bit. 1.6 mi. Secondary St. Hy. 11-C, Sprague to Lamont, FAS SG-0289 (2), Lincoln Co., to Roy L. Bair Co., 1220 Ide St., Spokane, **$96,067.** Bids 1/7. CD 12/27—ENR 12/30, under Streets-Roads.

New Brunswick—Province of N. B., Frederickton, bridge, Petitcodiac, to Dpt. P. Wks., Fredericton, **$75,000.**

STREETS AND ROADS

BIDS ASKED

STATE HIGHWAY LETTINGS

January 18
Kansas
Maryland
January 19
Kansas
January 20
Nebraska

January 21
Kansas
January 25
Kansas
January 26
California
Louisiana

January 18

Colorado—State Hy. Dpt., Denver.

Larimer Co.—Surf., oil processing, structures 4.94 mi. Hy. 14, bewteen Fort Collins and Walden. $162,207. Extended date. Mark U. Watrous, hy. engr. CD 1/4.

January 21

Missouri—State Hy. Dpt., Jefferson City.

Barry and Jasper Counties—oil aggregate surf. 27.044 mi. 5 sects., various routes. Div. 7, group 1.

Boone, Callaway, Cole, Casper, Moniteau and Montgomery Counties—oil aggregate surf. 67.123 mi. 13 sects. various routes, Div. 5, group 1, over $50,000.

Caldwell Co.—roll stone-b. conc. 4.964 mi. from De Kalb Co. line, east to Hamilton, Rt. 36, Sect. 12A, over $50,000.

4.88 mi. Rt. 36, Sect. 13 A, from De Kalb Co. line, east to Hamilton, over $50,000.

1.014 mi. Rt. 36, Sect. 14 A, from De Kalb Co. line east to Hamilton, under $50,000.

Caldwell, Clinton and De Kalb Counties—oil aggregate surf. 13.81 mi. 4 sects., various routes, Div. 1 Group 1, under $50,000.

Carroll, Henry, Lafayette and Platte Counties—seal coat, oil aggregate surf. 36.6 mi. Div. 4, group 1, 10 sections various routes, under $50,000.

Christian, Dallas, Greene, Polk and Webster Counties—oil aggregate surf. 49.876 mi. 9 sections various routes, Div. 8, group 1.

Dunklin, Mississippi and New Madrid Counties—sand asph. mat. surf. 16.351 mi. 4 sections, various streets, Div. 10, Group 2.

Franklin, Jefferson, Perry and Washington Counties—oil aggregate surf. 23.93 mi. 8 sections, various routes, Div. 6, group 1.

Jackson Co.—b. conc. 4.648 mi. Rt. 50, Sect. 2A, from near Lees Summit east toward Lone Jack, over $50,000.

b. conc. 2.185 mi. Rt. 50, sect. 1A, from near Lee Summit east towards Lone Jack, over $50,000.

Livingston Co.—roll stone-b. conc. 3.814 mi. Rt. 36, Sect. 21, from Chillicothe southwest towards Mooresville, over $50,000.

4.084 mi. Rt. 36, Sect. 22, from Chillicothe, southwest toward Mooresville, over $50,000.

Stoddard, Wayne, Bollinger, Butler, Mississippi and New Madrid Counties—oil aggregate surf. 50.095 mi. 15 sections various routes, Div. 10, group 1. C. W. Brown, ch. engr.

January 28

Kentucky—State Hy. Dpt., Frankfort.

Boyle Co.—traffic bound surf. 3.841 mi. Junction City-Forkland Rd., beginning approx. 1.5 mi. east of Forkland and exten. toward Junction City, S. P. S 104(1) SP 11-320.

Rowan Co.—high type surf. 3.308 mi. Morehead-Owingsville Rd., beginning at Licking River, exten. to near Bluestone, S. P FI 3(8), SP 103-82.

Tex., Corpus Christi—City, H. H. Allen, mgr., asph. Water St. $70,000. R. L. Otto, city engr. CD 4/19—ENR 4/29.

February 9

Louisiana—State Hy Dpt., Baton Rouge.

Assumption and Ascension Parishes — bit. 9.551 mi. Paincourtville-Donaldsonville Hy., State Rt. 77, S. P. 407-08-03 and 407-09-03.

Avoyelles Parish—c. conc. 2.758 mi. Red River Bridge approaches, (Moncla), State Rt. 57, War Emergency Relief Proj. No. WER-FAS 1(1), S. P. 33-03-10 and 33-02-08.

Bossier Parish—bit. 1.8 mi. Haughton-Doyline Hy., State Rt. 560, S. P. 122-30-04.

Caddo Parish—bit. 8.7 mi. Longwood-Mooringsport Hy., State Rt. 994, S. P. 48-03-03.

Evangeline Parish—bit. rein.-con. deck girder bridges 10.32 mi. Oakdale-Vidrine Hy., State Rt. 22, S. P. 66-06-07.

St. James Parish—bit. 17.4 mi. Remy-Ascension Parish Line Hy., State Rt. 1, S. P. 256-04-09 and 256-05-07.

St. James and St. John Parishes—bit 7.5 mi. St. John Parish Line-Remy and Reserve Rd. Hys., State Rts. 1 and 1122, S. P. 256-03-11 and 256-30-03.

St. Mary Parish—bit. 5.45 mi. North Bend-Bayou Sale Hy., State Rt. 60, S P. 243-02-10.

Tangipahoa Parish—bit. and timber trestle bridge repairs, 8.43 mi. Kentwood-Washington Parish Line Hy., State Rt. 71, S. P. 263-04-05.

LOW BIDDERS

Connecticut—State Hy. Dpt., Hartford, project withdrawn from Jan. 3 letting, b. conc. 807 ft. W. Mystic Ave., 2,162 ft. storm sewers in W. Mystic Ave., Town Aid Proj., Groton. CD 12/27—ENR 12/30.

Missouri—State Hy. Dpt., Jefferson City, Jan. 4, from Bridges Asphalt Paving Co., 1411 Central Industrial Dr., St. Louis, b. conc. 4.494 mi. Rt. 66, Sect. 71 B from Bourbeuse Railroad bridge, toward Pacific, Franklin Co., **$104,810;** 3.761 mi. Rt. 99 TR Sect. 1 A from Alton, Ill., south toward St. Louis, St. Charles Co., **$90,239*****from Granite Bituminous Paving Co., 3943 Duncan St., St. Louis, b. conc. 4.097 mi. Rt. 66, Sect. 2, from Conway through Lebanon, **$65,694;** 4.557 mi. Rt. 66 Sect. 3 from Conway through Lebanon, **$72,690;** 4.631 mi. Rt. 66 Sect. 4, from Conway through Lebanon, **$73,939,** all foregoing Laclede Co.*** from Fred Weber Contractor, Inc., 7929 Alabama St., St. Louis, graded earth and c. conc. 4.485 mi. Rt. 40 Proj. T I 236(6), from 2 mi. east of Montgomery Co. east through Warrenton, **$216,653;** 2 mi. east of Montgomery Co., east through Warrenton, Rt. 40 Proj. F I 23 6(8), road from 2 mi. east of Montgomery Co. east through Warrenton, **$369,922,** both Warren Co. CD 12/15—ENR 12/23.

†**South Dakota**—Bureau Reclamation, Dpt. Interior, Bldg. 1-A, Denver Federal Center, Denver, Colo., cancelled bids to have been opened Jan. 11, streets, sewerage, water, electrical distr. sys., Pump House 2; furnishing pump. units, tanks, equip. for Bixby Govt. Camp, Missouri River Basin Proj., Moreau River Unit, Spec. R6-22 (Region 6). CD 12/21—ENR 12/23.

CONTRACTS AWARDED

Washington—State Hy. Dpt., Olympia, surf. 4.443 mi. Wenatchee Heights Junction to Wenatchee, FAS S-0435 (1), Chelan Co. and grading, riprapping 0.459 mi. Primary State Hy. 15, Merritt to Leavenworth, ER. P. No. ER-14 (1), Chelan Co., to Goetz & Brennan, Seaboard Bldg., Seattle, **$159,965** and **$72,550** respectively; grading, draining 4.824 mi. State Hy. 2-F, Odair to Electric City, Grant Co., to Strong & McDonald, 4045 Ruston Way, Tacoma, **$416,842.** Grand total $649,357. Bids 1/7. CD 12/27—ENR 12/30.

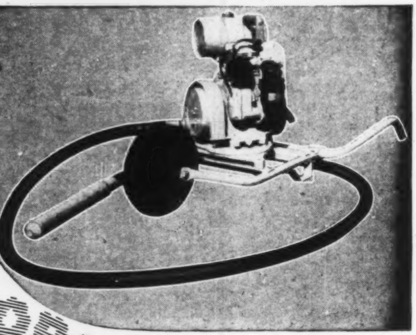
EARTHWORK, WATERWAYS

BIDS ASKED

January 18

†**Colorado and California**—Bureau Reclamation, Dpt. Interior, Bldg. 1-A, Denver Federal Center, Denver, Colo., furnish. del. f.o.b. cars shipping point or f.o.b. cars Granby, Colo. and Bethany, Calif., one 20 in siphon breaker for pump discharge outlets, Granby Pumping Plant, Colorado-Big Thompson Proj., Colo., three 20 in. siphon breaker for

JACSON FLEXIBLE SHAFT VIBRATORS



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pump discharge outlets, Tracy Pumping Plant, Central Valley Proj., Calif., Spec. 2491. Extended date. CD 12/8—ENR 12/16.

January 19

†Maryland—U. S. Eng., 21 St. and Virginia Ave. N. W., Wash., 25, D. C., maintenance dredging, Pocomoke River (The Muds), Somerset Co., and Fishing Bay, Dorchester Co. Serial No. Eng. 18-020-49-51, \$100,000-\$200,000. CD 6/9/44—ENR 6/29/44.

January 20

†Nebraska—Bureau Reclamation, Dpt. Interior, Superior, Superior-Courtland diversion dam and earthwork, structures for Superior Canal, Station 1 plus 74 to 10, plus 00, Missouri River Basin Proj., Bostwick Unit, Guide Rock, Spec. 2495. Plans deposit \$3.50. Extended date. CD 1/6.

January 21

†Washington—U. S. Eng., 4735 E. Marginal Way, Seattle, Zone 4, maintenance dredging Whatcom Creek Waterway, Bellingham. Spec. 45-108-49-102.

January 26

†Washington—U. S. Eng., 4735 E. Marginal Way, Zone 4, maintenance dredging East Waterway, at Seattle, Spec. 45-108-49-104.

On or About March 3

†Mass., West Springfield—U. S. Eng., Army Base, Boston, Riverdale Dike and Wayside and Riverdale Pumping Stations, West Springfield, Connecticut River Flood Control Proj. CD 1/7—ENR 2/3.

LOW BIDDERS

●†California—Bureau Reclamation, Dpt. Interior, Coachella, Jan. 4, earthwork, pipelines, structures, Laterals 119.64 to 123.4, sublaterals Unit 6, Coachella Valley Distr. Sys., All-American Canal Sys., Boulder Canyon Proj., Spec. 2488, from American Pipe & Constr. Co., P. O. Box 3428, Terminal Annex, Los Angeles, Zone 54, **\$2,049,923.** CD 12/7—ENR 12/9.

†California—Bureau Reclamation, Dpt. Interior, Antioch, Jan. 5, 100,000 gal. elevated water tank, Tracy Pumping Plant, Central Valley Proj., work approx. 9 mi. northwest of Tracy, Spec. 2487, from Darby Products of Steel Plate Corp., 1 and Walker Sts., Kansas City, Kan., **\$57,384.** CD 12/8—ENR 12/16.

†California—U. S. Eng., Wright Bldg., Sacramento, Jan. 4, levee setbacks and bank protection along left bank Old River on Stewart Tract, Serial No. Eng.-04-167-49-61, Spec. 1374, from A. Teichert & Son, Inc., Box 1113, Sacramento, **\$71,829.** CD 12/23.

†Michigan—U. S. Eng., 609 Federal Bldg., Detroit, Zone 31, cancelled bids to have been opened Jan. 18, flood protection works, incl. excav. cut-off canal, concrete weir and appurtenant structures, Mount Clemens, Serial No. Eng. 20-064-49-45. CD 12/23—ENR 1/6.

●†Montana — Bureau Reclamation, Dpt. Interior, Helena, rejected bids Dec. 1, Canyon Ferry Dam and power plant, Missouri River Basin Proj., Spec. 2434, L. B. **\$12,940,845.** Will readvertise. CD 12/3—ENR 12/9.

†North Carolina—U. S. Eng., 308 Customhouse, Wilmington, rejected bids Dec. 23, dredging Beaufort Harbor (Bulkhead Channel), Serial No. Eng-31-075-49-22. Will readvertise.

●†Oklahoma—U. S. Eng., Box 61, Gov. Aircraft Plant 3, Tulsa, Jan. 6, sluice gates, cranes, tunnels, access road in Tenkiller Ferry Dam on Illinois River, Sequoyah Co., Eng-34-066-49-39, from W. K. McIlyar, 8505 Douglas St., Dallas, Tex., **\$3,599,623.** Est. \$3,900,000. CD 11/15—ENR 11/18.

Que., Sorel—Dpt. P. Wks., Ottawa, Ont., Jan. 5, steel sheet piling retaining wall, from Lucien Lachapelle, 95 George St. Approx. **\$29,924.** CD 12/27—ENR 12/30.

CONTRACTS AWARDED

●†California—Bureau Reclamation, Dpt. Interior, Antioch, concrete lining, structures for Delta-Mendota Canal, Station 1366 plus 50 to 2149 plus 80, timber operating bridge at Station 1229 plus 28.0, Central Valley Proj., Spec. 2460, to Hubert H. Everist, Sr., Box 100, Westley, **\$3,679,107.** Bids 12/3, awarded 1/3. CD 12/9—ENR 12/16, under LB.

†Idaho—Bureau Reclamation, Dpt. Interior, Coeur D'Alene, pump discharge line, Sched. 1, concrete and steel pipe, Hayden Lake Unit, Rathdrum Prairie Proj., Spec. R1-30, (Region 1), to W. L. Ridge, Spokane, Wash., **\$93,544.** Bids 10/15, awarded 12/31. CD 9/23—ENR 9/30.

La., Lake Charles—Calcasieu Parish Police Jury, Lake Charles, Contr. B and Bayou Drainage Proj., Ward 3, to L. M. Ray Constr. Co., Monroe, **\$136,836;** excavating 540,000 cu. yd in Black Bayou, and 57,000 cu. yd. Starks Area, Ward 5, to B. Lewis, Eunice, **\$105,458.** CD 12/28.

●†South Dakota—Bureau Reclamation, Dpt. Interior, Lemmon, Shadehill Dam, Missouri Basin Proj. Grand River Unit, Spec. 2421, to S. J. Groves & Sons Co., 510 Wesley Temple Bldg., Minneapolis, Minn. and J. L. McLaughlin, Ford Bldg., Great Falls, Mont., **\$5,116,797.** Bids 10/28. CD 11/9—ENR 11/11, under LB.

LATIN AMERICA

Brazil, Contiguiba—Companhia, Nacional de Alcalis S. A., Rio de Janeiro, underground salt deposit, own forces. **$200,000.**

AIRPORTS AND AIRBASES

BIDS ASKED

January 21

N. C., Fayetteville — ADMINISTRATION BLDG.—City, Charles G. Rose, Jr., mayor, administration bldg. at Municipal Airport. Plans deposit $10. Mann & McLawhorn, Greensboro, engrs. and archts. CD 1/9/45—ENR 1/25/45.

February 7

Ia., Des Moines—ADMINISTRATION BLDG. —City, City Hall, administration bldg. at municipal airport, $698,470. Wm. Nielsen, Old Colony Bldg., archt. CD 3/3—ENR 3/18.

LOW BIDDERS

†Canal Zone—POST EXCHANGE SERVICE STATIONS—U. S. Eng., Box 5043, Ancon, Canal Zone, rejected bids Dec. 8, post exchange service station, France Air Force Base, Inv. 96-505-49-8. Will re-advertise.

CONTRACTS AWARDED

Alta., Namao—HOUSING—Dominion Govt., Dpt. National Defense, Cartier Sq., Ottawa, Ont., 50 units, married personnel at airport, to A. Johnson, 11204 99 Ave., Edmonton, **$400,000.** Canadian Commercial Corp., 70 Lyon St., Ottawa, Ont., engr. CD 6/28—ENR 7/8.

Newfoundland and Labrador, Goose Bay—AIRPORT IMPRVS.—Dominion Govt., Dpt. National Defense, Cartier Sq. Ottawa, Ont., airport imprvs., to Terminal Constr. Ltd., 1012 Dominion Square Bldg., Montreal, Que., **$90,000** Dpt. National Defense, Cartier Sq., Ottawa, Ont., archt. Canadian Commercial Corp., 70 Lyon St., Ottawa, Ont., engrs.

PUBLIC BUILDINGS

BIDS ASKED

January 18

†Ga., Augusta—U. S. Eng., Post Office Bldg., Savannah, Post Exchange Bldg. 402 addns., Oliver General Hospital, Serial Eng-08-133-49-142. Extended date. CD 1/5.

N. Y., New York—New York City Housing Auth. 63 Park Row, New York, Zone 7, general construction, heating and ventilating; electrical work, plumbing for Nostrand Houses Proj. NYC-11 to be constructed in area bounded by Bragg St., Avenue V, Batchelder St. and Avenue X. Plans deposit $25. Extended date. CD 12/31—ENR 1/6.

January 20

Alta., Lacombe—P. Campbell Hope, archt., 311 Union Bldg., Edmonton, high school for School Bd., Lacombe, $300,000. CD 1/19—ENR 2/26/48.

January 24

Ore., Portland — Portland Housing Auth., 9615 N. Foss St., converting 8 war dormitory bldgs. at Swan Island to 102 dwellings. Proj. PHA No. Ore-35388-F. Plans deposit $50. Wick & Hilgers, Spalding Bldg., archts.

January 25

Calif., Agnews—State Div. Architecture, P. Wks. Bldg., Sacramento, three 2 story, rein.-con. ward bldgs., Units 4, 5 and 6 at Agnews State Hospital. Plans deposit $25.

January 27

Ark., Mena—Polk Co., Mena, 36-bed hospital. Plans deposit $25. Haralson & Mott, Fort Smith, archts.

February 2

†Arizona — Bureau Reclamation, Dpt. Interior, Phoenix, misc. structural steel for Gila Substation, Spec. R3-PX-10, (Region 3). L. N. McClellan, Bldg., 10A, Denver Federal Center, Denver, Colo, ch. engr.

●Wash., Seattle—School Dist. 1, 810 Dexter Ave., 1 and 2 story, rein.-con., masonry Junior High School. $2,000,000. Wm. Mallis, 631 Lyon Bldg., Zone 4, archt. CD 11/10—ENR 11/25.

February 8

†Arizona and California—Bureau Reclamation, Dpt. Interior, Bldg., 1-A, Denver Federal Center, Denver, Colo., furnishing del. f.o.b. cars shipping point or f.o.b. cars Earp, Calif., one 10-ton, 3-motor floor-operated, overhead, traveling crane for Parker Power Plant machine shop, Parker Dam Proj., Spec. 2529. L. N. McClellan, ch. engr.

†Washington—Bureau Reclamation, Dpt. Interior, Bldg. 1-A, Denver Federal Center, Denver, Colo., one 72 in. ring-seal gate, hoist, drive unit, position indicator, limit switch, seal-control valve and wrenches, for station-service penstock, Grand Coulee Power Plant. Columbia Basin Proj. Spec. 2530. Plans deposit $2.

†Washington—Bureau Reclamation, Dpt. Interior, Bldg. 1-A, Denver Federal Center, Denver, Colo., one 72 in. ring-seal gate and hoist for station-service penstock, Grand Coulee Power Plant, Columbia Basin Proj., Spec. 2530.

February 17

†Arizona and Nevada—Bureau Reclamation, Dpt. Interior, Bldg. 1-A, Denver Federal Center, Denver, Colo., five 2,000-amp bus structures with current and potential transformers, disconnecting and grounding switches, capacitors and lightning arresters for unit 1 through 5; five 75 kva transformers; and five 85 kw resisters for Davis Power Plant, Kingman, Davis Dam Proj., Spec. 2528.

On or About February 21

†Ala., Bay Minette—U. S. Eng., P. O. Box 1169, Mobile, motor vehicle storage bldg., Inv. Ser. No. 01-076-49-02. CD 5/11—CD 5/27.

†Ala., Haleyville—U. S. Eng., P. O. Box 1169, Mobile, motor vehicle storage bldg., Inv. Ser. No. 01-076-49-06.

†Ala., Hamilton—U. S. Eng., P. O. Box 1169, Mobile, motor vehicle storage bldg., Ser. No. 01-076-49-06.

†Ala., Hartford—U. S. Eng., P. O. Box 1169, Mobile, motor vehicle storage bldg., Inv. Ser. No. 01-076-49-04.

†Ala., Oneonta—U. S. Eng., P. O. Box 1169, Mobile, motor vehicle storage bldg., Inv. Ser. No. 01-076-49-05.

†Ala., Sylacauga—U. S. Eng., P. O. Box 1169, Mobile, motor vehicle storage bldg., Inv. Ser. No. 01-076-49-03.

February 24

†California—Bureau Reclamation, Dpt., Interior, Bldg. 1-A, Denver Federal Center, Denver, Colo., furnishing, del. f.o.b. cars shipping point or f.o.b. cars Redding, three 196,000 volt insulated, 300/600 to 5 ampere, oil-immersed, self-cooled outdoor current transformers; three 196,000 volt-insulated, 138,000 to 69/115 volt, oil immersed, self-cooled, outdoor potential transformers, and one three-phase, three-element, four-wire, watthour recording demand meter for Shasta substation, Central Valley Proj., Spec. 2531. L. N. McClellan, ch. engr.

LOW BIDDERS

Ark., Little Rock—State Hospital for Nervous Diseases, Little Rock, Jan. 5, general contract 4 wing unit for tubercular patients at State Hospital, from Ditmars, Dickman & Pickens, Gazette Bldg., **$467,890.** CD 12/28.

Conn., Hartford — State, Fred R. Zeller, comptroller, State Capitol, Dec. 27, 1 and 2 story, 40 x 182 ft., 3 wings 40 x 78 ft. brick, steel, concrete E-shaped alcoholic hospital, Coventry St., from Associated Constr. Co., 1010 Wethersfield Ave., **$423,500,** Est. $425,000. CD 12/9—ENR 12/16.

Va., Marion—State of Virginia, Richmond, Jan. 3, laundry for Southeastern State Hospital from Trinkle & Dobyns, Dublin, **$131,000.** CD 12/15—ENR 12/30.

●Wis., Beloit—Bd. Educ., Beloit, Jan. 4, 1, 2 and 3 story, 319 x 541 ft. U-shaped Senior High School, from Sherry-Richards Co., 201 N. Wells St., Chicago, Ill., **$2,364,830.** CD 12/14—ENR 12/16.

●†Alaska—Dpt. Commerce, R. A. Rich, chief of Contract & Procurement Div., Box 440, Anchorage, Dec. 9, six two story frame apartments concrete fdns. at Annette, from M. P. Munter Co., Vance Bldg., Seattle, Wash., **$628,984*****one at Cordova and 2 at Yakutat, from Keil & Peterson, Cordova, **$367,167***** 3 at Woody Island, from H. F. Wolff, Anchorage, **$313,000.** CD 11/29.

CONTRACTS AWARDED

Colo., Fort Collins—Colorado A. & M. College, Fort Collins, 1 and 2 story, 250 x 350 ft. veterinary hospital, to Brown-Schrepfermann & Co., 240 Washington St., Denver, Est. **$400,000.** CD 12/15—ENR 1/1.

Colo., Trinidad—City, J. R. Fuller, mgr., municipal steam electric generating plant, two 3,000 kw. turbo-generator units, two 45,000 sq. ft condensors and 1 set switchgear, to Westinghouse Electric & Mfg. Co., Gas and Electric Bldg., Denver, **$365,513.** Rocky Mountain Eng. Co., 1441 Welton St., Denver, engrs. and archts. CD 4/14—ENR 4/29.

Conn., Storrs—State, Fred R. Zeller, comptroller, State Capitol, Hartford, utilities and services, physical education group bldgs., constructing conduits, pipelines, etc., University of Connecticut, to A. Barry Constr. Co., 57 Farmington Ave., Hartford, **$97,440.**

†North Dakota—U. S. Eng., Box 300, Fort Lincoln, Bismarck, constructing Townsite, Stage III, Garrison Dam and Reservoir, Riverdale, Inv. 32-015-49-41, to National Builders, Inc. 6004 Tracy Ave., Minneapolis, Minn. **$948,615.** Bids 11/30. CD 12/8—ENR 12/16, under LB.

Wash., Everett—State Hy. Dpt., Olympia, shop bldgs. for maintenance headquarters, to Odegard Constr. Co., Everett, **$127,950.** Bids 1/7. CD 12/27—ENR 12/30, under Streets & Roads Washington Roads.

COMMERCIAL BUILDINGS

BIDS ASKED

January 18

N. C., Mooresville — The Civic Planning Council, Inc., Mooresville, war memorial community center bldg. Plans deposit $25. V. W. Breeze & Assoc., Inc., Shelby, archt.

January 20

La., New Orleans—Wogan, Bernard & De La Vergne, archts., Pere Marquette Bldg., 2 story convent, 3 story parochial school, 1 story gymnasium, auditorium bldg., for St. Louis Cathedral, 615 Perc Antoine Alley.

January 25

Fla., White Springs—Stephen Foster Memorial Comn., White Springs, museum, curators dwelling and service bldg. Total est. $500,000. Plans deposit $25. Mackey W. White, RFD No. 1, Box 558, Annandale, Va., archt. and engr. CD 11/5—ENR 11/18.

February 2

●N. Y., Watertown—House of the Good Samaritan, 832 Washington St., hospital alterations, addns. $1,500,000. Crow, Lewis & Wick, 200 Fifth Ave., New York, archts. CD 5/14/47—ENR 5/22/47.

Bids Asked

Que., St. Jerome—A. Lapointe, 225 Labelle St., 4 story, bsmnt., concrete, steel, brick hotel. $300,000. CD 6/28—ENR 6/8.

SOON LETS CONTRACT

Calif., Boyes Hot Springs—Roman Catholic Archbishop of San Francisco, c/o Archbishop Hanna Center Inc., 785 Market St., soon lets contract Archbishop Hanna School for Boys, Over $500,000. Plans deposit $100. Extended date. J. Francis Ward, John S. Bolles & Mario Ciampi, 580 Market St., San Francisco, archts. Clarence E. Seage, 932 Monadnock Bldg., San Francisco, engr. CD 12/15—ENR 12/30.

Ia., Sioux City—Morningside College, Morningside Ave., soon lets contract, fieldhouse and swimming pool, $400,000. Extended date. Wm. Beuttler, 405 Insurance Exchange Bldg., archt. CD 1/7—ENR 1/22.

N. C., Greensboro—Voorhees, Walker, Foley & Smith, archts., 101 Park Ave., New York, N Y., soon lets contract store for Ellis Stone Co., Greensboro. Extended date. CD 12/28—ENR 12/30.

CONTRACTS AWARDED

Ore., Portland—Prescott Corp., 7535 N. E. Glisan St., 51 dwellings, 84 to 87 and Knapp to Flavel Sts. force account. **$300,000.** Ormond A. Bean, Fenton Bldg., archt.

Tex., Houston—Brace & Carruth, 1087 W. 41 St. 41 dwellings, Gardenia St., own forces. **$410,000.** CD 1/5.

Tex., Houston—Michael DeGeorge, Casper M. DeGeorge Estate, Ambassador Hotel, tourist motel, to Sam Lopresti, 2901 Palm St. Approx. **$250,000.** CD 9/28/45—ENR 10/11/45.

Tex., Pasadena—Max Krauss, Pasadena, 100 addnl. duplex dwellings, adjacent to Maxwell Houses, Inc., own forces. **$800,000.** CD 4/13—ENR 4/29.

Wis., Fort Atkinson—Fort Atkinson Memorial Hospital, Fort Atkinson, general contract, 2 story, bsmnt. hospital, to T. S. Willis, 326 Hayes Block, Janesville, **$538,890.** Bids 11/3. CD 11/9—ENR 11/18, under LB.

Que., La Minerve—Chapleau Club La Minerve, fishing club, to G. Archambault, Ltd., 726 Atwater St., Montreal, **$70,000.** Cravier & Belanger, 5276 Notre Dame de Grace Ave., Montreal, archts.

INDUSTRIAL BUILDINGS

BIDS ASKED

Ont., Windsor — GARAGE — James Martin, 2088 Willistead Crescent, 70x105 ft., concrete, steel, brick garage addn. $80,000.

LOW BIDDERS

N. C., Charlotte — WAREHOUSE, etc. — Cherry-Burrell Corp., 607 W. 5 St., warehouse and office, from Laxton Constr. Co., Inc., 127 Brevard Court, **$203,421.** CD 11/23—ENR 12/2.

N. C., Clinton — PLANT — Lundy Packing Plant, Clinton, Jan. 4, packing plant, from W. A. Simon, Inc., 309½ Marstellar St., Wilmington, **$222,554.** CD 12/14—ENR 12/16.

CONTRACTS AWARDED

Conn., Waterbury—PLANT—Waterbury Hospital, Robbins St., 1 story, 40 ft. high, 45x67 ft., brick, steel, concrete boiler plant addn., Robbins St., to W. J. Megin, Inc., 51 Elm St., Naugatuck. Est. **$68,000.**

Ill., Chicago—FACTORY, etc.—Perkins Products Co., 5555 W. 65 St., 1 story, brick, steel factory, 2 story office bldg., to Algot B. Larson, Inc., 3837 W. Lake St. Est. **$750,000.** Sessions Eng. Co., 1 N. LaSalle St., engr.

N. Y., Rochester—PLANT—Eastman Kodak Co., Kodak Park, Rochester, Zone 4, 3 story Bldg. 28 addn. in Kodak Park, own forces. **$628,000.** CD 8/19—ENR 8/26.

Tex., Houston — PLANT — George Rackle & Sons, 8500 Lyons St., mfg. plant, to The Austin Co., M & M Bldg., Approx. **$100,000.** CD 1/5.

Tex., San Antonio — SERVICE STATIONS — Sinclair Refining Co., c/o E. D. Piper, 1305 S. Laredo St., 6 service stations, to Gay Hughes, 428 Gunter Bldg., **$105,000.** Est. $115,000. Bids 11/29. CD 11/23—ENR 12/2.

Proposal Advertisements, see pp. 56 & 57.

OFFICIAL PROPOSALS

Bids: January 18, 1949 (810)

Garbage Incinerator Repairs

NOTICE TO BIDDERS.

SEALED BIDS for repairing the walls, arches and flues of the four furnaces at the City Incinerator, Long Beach, Long Island, N. Y., together with the furnishing and installation of a new cast iron ring for each charging opening, will be received by the City Council of the City of Long Beach at City Hall, Long Beach, N. Y., until eight o'clock P.M. Eastern Standard Time, on Tuesday, January 18, 1949, and then and there publicly opened and read aloud.

Notice to Bidders, forms of proposal and contract, and specifications may be examined at the office of the City Clerk during the hours of 9 A.M. to 4 P.M., from Monday to Friday, inclusive.

The City Council of the City of Long Beach reserves the right to waive any informalities in or to reject any or all bids, or to accept any bid which they deem to be most favorable to the interests of the City.

Maurice J. Fleischman
City Clerk
January 5, 1949. Long Beach, N. Y.

Bids: January 18, 1949 (811)

Garbage Incinerator Repairs

NOTICE TO BIDDERS.

SEALED BIDS for repairs to the charging floor of the City Incinerator located at 120 State Street, Long Beach, L. I., N. Y., will be received by the City Council of the City of Long Beach at City Hall, Long Beach, N. Y., until eight o'clock P.M. Eastern Standard Time, on Tuesday, January 18, 1949, and then and there publicly opened and read aloud.

Notice to Bidders, forms of proposal and contract, and specifications may be examined at the office of the City Clerk during the hours of 9 A.M. to 4 P.M., from Monday to Friday, inclusive.

The City Council of the City of Long Beach reserves the right to waive any informalities in or to reject any or all bids, or to accept any bid which they deem to be most favorable to the interests of the City.

Maurice J. Fleischman
Long Beach, N. Y. City Clerk
January 5, 1949.

OFFICIAL PROPOSALS

Bids: January 26, 1949 (792)

Reservoir and Appurtenances

Office of City Purchasing Agent
Nashville, Tennessee

Sealed bids will be received by the Purchasing Agent of the City of Nashville, Tennessee, at the office of the Purchasing Agent, until 10:00 A.M. Central Standard Time, January 26th, 1949, for the West Nashville Concrete Reservoir and Appurtenances, according to plans and specifications which are on file in the office of the Director of the Nashville Waterworks Department, Room 201 City Hall, Nashville, Tennessee, and also the office of The Chester Engineers, 210 East Park Way, Pittsburgh 12, Pa. Immediately after closing time for the receipt of bids they will be publicly opened and read aloud in the office of the Purchasing Agent, City Hall.

The successful bidder will be required to furnish a satisfactory performance bond.

All bids shall be made upon the blank forms of the contract documents. Copies of all contract documents, including Proposal Form, Contract Plans and Specifications and Instructions to Bidders may be obtained at the office of The Chester Engineers by depositing Twenty-five Dollars ($25.00) for each set of documents so obtained . The entire deposit will be refunded to each actual bidder and Fifteen Dollars ($15.00) will be returned to all others who return plans and specifications in good condition within ten (10) days after opening of bids.

The right is reserved by the City of Nashville, through its Mayor, to reject any and all bids, to waive any informalities in the bids received, and to accept any bid, which in its opinion, may be for the best interest of the City.

A certified check or bank draft, payable to the City of Nashville, or a satisfactory bid bond executed by the bidder and a surety company authorized to transact business in the State of Tennessee, in an amount equal to Five Percent (5%) of the bid, shall be submitted with each bid.

No bid may be withdrawn after the scheduled time for the receipt of bids.

CITY OF NASHVILLE, TENNESSEE
E. B. Smith,
A-1. Purchasing Agent.

Bids: February 2, 1949 (812)

State Road Work

NOTICE TO CONTRACTORS: STATE DEPARTMENT OF PUBLIC WORKS, ALBANY, N. Y.—Pursuant to the provisions of Chapter 63 Laws of 1936, as amended, and special provisions for projects financed with federal aid funds, sealed proposals will be received until ten-thirty o'clock A.M., eastern standard time on *WEDNESDAY, FEBRUARY 2, 1949* by Henry A. Cohen, Director, Bureau of Contracts & Accounts, *14th* Floor, The Governor Alfred E. Smith State Office Building, Albany, N. Y., for the following projects: Maps, plans, specifications and proposal forms may be seen and obtained at the office of the State Department of Public Works, Bureau of Contracts & Accounts, Albany, N. Y., and at the office of the District Engineers noted below, and may also be seen at the office of the State Department of Public Works, 270 Broadway, New York City.

The deposit for plans and proposal forms for each contract containing 1 to 15 sheets is $5.00; 16 to 30 sheets, $10.00; over 30 sheets, $20.00. A refund will be made in full to bidders for the return of one set in good condition within 30 days of award or rejection of bids; refund for all other sets in good condition, similar period, will be 50% of deposit.

County	Contract No.	Name	Miles	Type	Deposit	Cost of Work
DISTRICT No. 1						
G. L. Nickerson, Dist. Engr., 353 Broadway, Albany, N. Y.						
Warren	FASS 49-4	Sodom—No. Creek, Co. Rd. No. 29 Proj. No. S223(1)	3.90	I-Beam 41'—8 1/2" Conc. Slab 27' Gravel Surf. Treat.	$16,000 Plans $10.00	$275,000
DISTRICT No. 2						
L. Ketchum, Dist. Engr., 109 No. Genesee St., Utica, N. Y.						
Fulton	FAS SH 49-2	Meco—Cork, Pt. 1 Proj. No. S224(1)	1.26	Bit. Mac. Pen. Meth.	$4,500 Plans $5.00	$83,000
DISTRICT No. 3						
Wm. Robinson, Dist. Engr., Weigh Lock Bldg., Syracuse, N. Y.						
Onondaga	FG RC 49-4	Separation of Grades D.L. & W. R.R. Lafayette-Onativia. S. H. 9086 Proj. No. FG 470(14)	0.51	Plate Girder 104' Conc. 8" Thk., 24', Var Wdt.	$23,000 Plans $5.00	$415,000
Oswego	FAS SH49-3	New Haven—Texas, Pt. 1 Proj. No. S233(1)	2.89	I-Beam With Conc. Slab "43' 9" Conc. Frame 24' Conc. 9" Thk. 21' Wdt.	$27,000 Plans $5.00	$497,000
DISTRICT No. 4						
A. R. Mulligan, Dist. Engr., Barge Canal Terminal, Rochester 1, N. Y.						
Orleans & Monroe	RC 49-5 FASS 49-5	Lake Pt. 2 and Fourth Sect., S. H. 492 S. H. No. 392—Clarendon-Monroe Co. Line Proj. No. S242(1)	7.49	Graded Gravel Double Surf. Treat.	$13,000 Plans $10.00	$229,000
DISTRICT No. 10						
J. J. Darcy, Dist. Engr., Montauk Hwy. at Little East Neck Rd., Babylon, L. I., N. Y.						
Bronx	FA CBE 49-2	Cross Bronx Expy. Cont. 8A (Longfellow Ave.—Harrod Ave.) Proj. No. U1084(2)	0.39	6 Brs. Substructures Total Spans 78'-7 1/2" 1396', 176', 388', 441' 9", 469' Grad. & Structures	$200,000 Plans $20.00	$3,345,000
Queens	FA VWE 49-1	Van Wyck Expressway (Cont. 5B) Proj. No. U1085(10)	0.89	Steel Beams, 2 at 50'-6 1/2" Steel Beams, 2 at 51'-2 3/16" Grading	$110,000 Plans $20.00	$1,910,000

Proposal for each contract must be submitted in a separate sealed envelope with the name and number of the contract plainly endorsed on the outside of the envelope. Each proposal must be accompanied by a cash, draft or certified check payable to the order of "State of New York, commissioner of Taxation & Finance" for the sum as specified in the advertisement and the proposal. The retention and disposal of the bidding check, the execution of the contract and bonds shall conform to the provisions of the Highway Law, as set forth in "Instructions to Bidders".

When optional types are permitted on contracts with federal funds, bidders must state in the space provided in the proposal the exact designation of the optional type upon which the proposal is predicated.

The right is reserved to reject all bids.

B. D. Tallamy, Supt. of Public Works

OFFICIAL PROPOSALS

Bids: January 24, 1949 (798)

Widening Bridge Roadway

THE DELAWARE RIVER JOINT COMMISSION

Sealed bids will be received for Widening the Bridge Roadway between Bent 14 near Fourth Street, Philadelphia, and Bent 29 near Fourth Street, Camden on the Bridge connecting the cities of Philadelphia, Pennsylvania and Camden, New Jersey, to be identified as Contract No. 4, at the office of the Secretary of The Delaware River Joint Commission, Administration Building, Bridge Plaza, Camden, New Jersey, until 1:30 P. M. Eastern Standard Time, Monday, January 24, 1949 and then and there will be publicly opened and read.

A more complete description of the work and full information for bidders are given in the Contract Documents and Specifications for this contract, which may be obtained upon a deposit of $10.00 which will be remitted upon receipt of bid or the return in good condition of the copies so taken within thirty days after the opening of bids.

Each proposal must be accompanied by a certified or cashier's check in the sum of $100,000.00 payable to The Delaware River Joint Commission and drawn upon a national or state bank or trust company having an office either in Philadelphia, Pennsylvania or Camden, New Jersey and the Surety's consent must be shown. The bidder to whom the contract is awarded will be required to furnish a Performance and Labor and Materialmen's Bond in the sum of 100 percent.

The Commission will afford prospective bidders an opportunity to inspect the work to be done.

The right is reserved to reject any or all bids.

THE DELAWARE RIVER JOINT COMMISSION
JOSEPH K. COSTELLO
SECRETARY

Bids: January 24, 1949 (797)

New Roadway Lighting System

THE DELAWARE RIVER JOINT COMMISSION

Sealed bids will be received for New Roadway Lighting System, to be identified as Contract No. 2A, at the office of the Secretary of The Delaware River Joint Commission, Administration Building, Bridge Plaza, Camden, New Jersey, until 1:30 P. M., Eastern Standard Time, Monday, January 24, 1949 and then and there will be publicly opened and read.

A more complete description of the work and full information for bidders are given in the Contract Documents and Specifications for this contract, which may be obtained upon a deposit of $10.00 which will be remitted upon receipt of bid or the return in good condition of the copies so taken within thirty days after the opening of bids.

Each proposal must be accompanied by a certified or cashier's check in the sum of $20,000.00 payable to The Delaware River Joint Commission and drawn upon a national or state bank or trust company having an office either in Philadelphia, Pennsylvania or Camden, New Jersey and the Surety's consent must be shown. The bidder to whom the contract is awarded will be required to furnish a Performance and Labor and Materialmen's Bond in the sum of 100 percent.

The Commission will afford prospective bidders an opportunity to inspect the work to be done.

The right is reserved to reject any or all bids.

THE DELAWARE RIVER JOINT COMMISSION
JOSEPH K. COSTELLO
SECRETARY

U. S. Government

UNITED STATES DEPARTMENT OF THE INTERIOR, Bureau of Reclamation. Sealed bids (Specifications No. 2525) will be received by Bureau of Reclamation, Denver, Colorado, until 2 p.m., February 3, 1949, and then publicly opened for furnishing one 56-inch diameter welded-plate-steel outlet pipe; one 32-inch diameter welded-plate-steel outlet pipe; and one 26-inch diameter welded-plate-steel outlet pipe for the Bonny Dam outlet works, St. Francis Unit, Colorado-Kansas, Missouri River Basin Project. Delivery is desired within 250 days. For particulars, address the Bureau of Reclamation, Building 1-A, Denver Federal Center, Denver, Colorado.

MICHAEL W. STRAUS, Commissioner.
(807)

(Continued on page 57)

(Continued from page 56)

Bids: January 25, 1949 (806)

General Construction

Sealed proposals will be received at the office of the City Purchasing Agent, 4th Floor, Mosque Building, Laurel & Main Streets, Richmond, Virginia, until but not later than 11 o'clock a. m. January 25, 1949, for grading area adjacent to Administration Building now under construction, concrete apron, concrete sidewalk, oil-gravel roadways and parking areas, concrete curb, storm sewer manholes and catch basins, and concrete roadways located at Richard E. Byrd Flying Field, Richmond, Virginia. Proposal forms, plans and specifications may be obtained at the Department of Public Works, 217 Governor Street, Richmond, Virginia, upon deposit of $10.00, which amount will not be refunded unless a bona fide bid is submitted and plans and specifications returned in good condition. A certified or cashiers check for $11,000 or bid bond for $13,200 as stated on proposal must accompany each bid as a guarantee of execution of contract. Checks to be made payable to the City of Richmond. The contract may be awarded by the Purchasing Agent to the lowest responsible bidder, who shall be determined in accordance with rules and regulations governing purchases or contracts adopted and established by the Council, and in accordance with and pursuant to Sections 5.09, 5.11 and 12.07 of the City Charter.

J. W. Huffman
City Purchasing Agent

Bids: January 25, 1949 (787)

Repairing 9th Street Bridge

Richmond, Virginia.

SEALED PROPOSALS WILL BE RECEIVED AT THE OFFICE OF THE CITY PURCHASING AGENT, 4TH FLOOR, MOSQUE BUILDING, LAUREL & MAIN STREETS, RICHMOND, VIRGINIA, UNTIL BUT NOT LATER THAN 11 O'CLOCK, A. M. January 25, 1949 for the "furnishing of materials and labor for repairing 9TH STREET BRIDGE over James River, Richmond, Virginia".

Form of Proposal, Plans and Specifications may be obtained upon application to the Director of Public Works, 217 Governor Street, Richmond, Virginia.

A charge of $5.00 will be made for these plans, etc., which sum will not be refunded unless a bona fide bid is submitted, and the plans, etc., returned.

A CERTIFIED OR CASHIER'S CHECK payable to the City of Richmond for the amount stated ($6,000.00) on proposals must accompany each bid as a guaranty of execution of contract. A BIDDER'S BOND for $7,200.00) will be accepted in lieu of a certified or cashier's check.

The contract may be awarded by the purchasing agent to the lowest responsible bidder, who shall be determined in accordance with rules and regulations governing purchases or contracts adopted and established by the council, and in accordance with and pursuant to sections 5.09, 5.11 and 12.07 of the city charter.

J. W. Huffman,
City Purchasing Agent.

Bids: January 24, 1949 (805)

Construction of Grading, Drainage and Structures of Turnpike

PENNSYLVANIA TURNPIKE
COMMISSION
Harrisburg, Pennsylvania
NOTICE TO BIDDERS

Sealed proposals will be received by the Pennsylvania Turnpike Commission, through the Chairman, 11 North Fourth Street, Harrisburg, Pennsylvania, until 2:00 P.M. (Eastern Standard Time), *the 24th day of January, 1949*, and immediately thereafter will be taken to the Public Utility Commission's Hearing Room No. 1, North Office Bldg., Harrisburg, Pennsylvania, and immediately publicly opened and read aloud, for the following contract:

For construction of grading, drainage and structures of Turnpike *Section 23B*, part of the Philadelphia Extension, in *Londonderry and Conewago Townships, Dauphin County, and South Londonderry Township, Lebanon County*, Commonwealth of Pennsylvania. This section being situated as follows:

Beginning at a point 0.21 miles Southeast of the juncture of Traffic Route 341 and Township Road 566, Londonderry Township at Station 470 + 63.88 (Dauphin County) thence in a Easterly direction to a point near the Dauphin-Lebanon County line at Station 0 + 12 (Lebanon County) a distance of 4.31 miles.

Approximate quantities of the principal items are as follows:

Class I Excavation	395,000	Cubic Yards
Class II Excavation	15,000	Cubic Yards
Class A Concrete	2,500	Cubic Yards
Class B Concrete	4,250	Cubic Yards
Plain Steel Bars	601,000	Lbs.
Fabricated Structural Steel	135,000	Lbs.

Copies of plans, specifications and other contract documents, including cross-sections, are on file and open to public inspection at the offices of the Pennsylvania Turnpike Commission located at Harrisburg, Pennsylvania, on January 11, 1949. Copies of cross-sections may be purchased from the Pennsylvania Turnpike Commission for the sum of Fifty Dollars ($50.00) per set.

Specifications and contract documents, exclusive of cross-sections, may be obtained from the Commission upon deposit of Ten Dollars ($10.00) for each set, such deposits to be refunded in full to any actual bidder upon return of such documents in good condition within five (5) days after the date of the opening of the bids. Refund will be made for all plans, contract documents and cross-sections returned, if the project is withdrawn from letting by the Pennsylvania Turnpike Commission. Remittances are payable to the Pennsylvania Turnpike Commission and must accompany requests for drawings, specifications and cross-sections.

The character and amount of bid security to be furnished by bidder is stated in the Instructions to Bidders.

No bids may be withdrawn for thirty (30) days after the scheduled closing time for receipt of bids.

PENNSYLVANIA TURNPIKE
COMMISSION
James F. Torrance
Secretary and Treasurer
Harrisburg, Pennsylvania
December 30, 1948.

Bids: January 27, 1949 (809)

State Road Work

STATE OF NEW JERSEY
STATE HIGHWAY DEPARTMENT
TRENTON

NOTICE IS HEREBY GIVEN that sealed bids will be received by State Highway Commissioner for:

ROUTE 4 PARKWAY, SECTION 1B

Construction of Bridge and Approaches at Route 100 and Main Street, on Route 4 Parkway, Section 1B, in Woodbridge Township, Middlesex County. Federal Project No. U-188(8). Length 0.084 miles.

Estimated:

Roadway Items

39,100	cu. yds. Roadway Excavation-Earth
1,800	cu. yds. Wet Excavation
13,400	sq. yds. 4" Macadam Base Course
13,400	sq. yds. 3" Pen. Mac. Intermediate & Surface Courses
803	tons Pavement, Type A or T

Bridge Items

11,435	sq. ft. Random Ashlar Masonry
95	cu. yds. Dimension Masonry
6,495	cu. yds. Foundation Excavation
8,098	cu. yds. Concrete in Structures
537,500	lbs. Rein. Steel in Structures
3,685,000	lbs. Structural Steel

Bids for the above will be received at the office of the State Highway Department, Room 102, State House Annex, Trenton, N. J., on Thursday, January 27, 1949 at eleven o'clock (11:00 A.M.—EASTERN STANDARD TIME), and will be opened and read immediately thereafter.

The receipt and opening of bids is subject to the proper qualification of the bidder in accordance with the provisions of the prequalification law and the regulations adopted by the State Highway Commissioner. Bidders must also submit a revised financial statement and statement of plant and equipment with their bid.

NOTE: The proposed project is a "Federal Aid Project" authorized by the provisions of Title 27 of the Revised Statutes of New Jersey and supplements and by Sections 2, 3 and 4, P. L. 521, 78th Congress, and is to be performed in accordance with the special provisions and requirements of the Federal Works Agency, Public Roads Administration, as outlined in the specifications, which provisions require that labor be employed from lists furnished by the State Employment Service, Cor. Maple and Fayette Streets, Perth Amboy, N. J. The attention of bidders is directed to the special provisions covering subletting or assigning the contract. The minimum wage paid to all unskilled labor employed on this contract shall be 65¢ per hour. The minimum wage paid to all intermediate grade of labor employed on this contract shall be 75¢ per hour. The minimum wage paid to all skilled labor employed on this contract shall be $1.25 per hour.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, N. J., and may be inspected by prospective bidders during office hours. Plans will be furnished on a deposit of Ten Dollars ($10.00) for each set of plans upon application to A. Lee Grover, Chief Clerk, State Highway Department, Room 102, State House Annex, Trenton, N. J. Bids must be made upon the standard proposal forms in the manner designated in the standard State Highway specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten percent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and must be delivered at the above place on or before the hour named. Copies of the standard proposal forms and special addressed envelopes will be furnished on application. Bids not enclosed in sealed special addressed envelopes will be considered informal and will not be opened. The right is reserved to reject any or all bids.

Signed: Spencer Miller, Jr.
State Highway Commissioner

Bids: January 27, 1949 (808)

Bridge

STATE OF NEW JERSEY
STATE HIGHWAY DEPARTMENT
TRENTON

NOTICE IS HEREBY GIVEN that sealed bids will be received by State Highway Commissioner for:

ROUTE 25, SECTION 34E, BRIDGE & BRIDGE APPROACH LIGHTING

Construction of Bridge and Bridge Approach Lighting System, Route 25, Section 34E, from Pulaski Skyway to Port Street in the City of Newark, Essex County. The work consists of furnishing and installing a lighting system composed of two hundred fifty three (253) highway lighting units, together with lighting on under-decks of nine (9) bridges and of a pedestrian walkway, employing underground series lighting circuits.

The principal items of construction are:
Estimated:

245—Lighting Standards
260—Luminaires
235—Insulating Transformers
9,500 lin. ft.—500 Volt Neoprene Cable
51,000 lin. ft.—5000 Volt Armored Cable
1,900 lin. ft.—7500 Volt R & L Cable
28,000 lin. ft.—Trenching & Backfill
30,000 lin. ft.—600 Volt Neoprene Cable
2,100 lin. ft.—Genuine W. I. Pipe

Bids for the above will be received at the office of the State Highway Department, Room 102, State House Annex, Trenton, N. J., on Thursday, January 27, 1949, at eleven o'clock (11:00 A.M.—EASTERN STANDARD TIME), and will be opened and read immediately thereafter.

The receipt and opening of bids is subject to the proper qualification of the bidder in accordance with the provisions of the prequalification law and the regulations adopted by the State Highway Commissioner. Prequalification in an appropriate class by any other Division of State Government will be accepted as qualifying the bidder for this work.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders during office hours. Plans will be furnished on a deposit of Ten Dollars ($10.00) for each set of plans upon application to A. Lee Grover, Chief Clerk, State Highway Department, Room 102, State House Annex, Trenton, N. J. Bids must be made upon the standard proposal forms in the manner designated in the standard State Highway specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and must be delivered at the above place on or before the hour named. Copies of the standard proposal forms and special addressed envelopes will be furnished on application. Bids not enclosed in sealed special addressed envelope will be considered informal and will not be opened. The right is reserved to reject any or all bids.

Signed: Spencer Miller, Jr.
State Highway Commissioner

SEARCHLIGHT SECTION

EMPLOYMENT • BUSINESS • OPPORTUNITIES • EQUIPMENT—USED or RESALE

UNDISPLAYED RATE:
(Not available for equipment advertising)

$1.20 cents a line, minimum 4 lines. To figure advance payment count 5 average words as a line.

POSITIONS WANTED (full or part-time individual salaried employment only). ½ the above rates, payable in advance.

PROPOSALS, $1.00 a line an insertion

INFORMATION:

BOX NUMBERS care publication New York, Chicago or San Francisco offices count as 1 line additional in undisplayed ads.

DISCOUNT of 10% if full payment is made in advance for four consecutive insertions of undisplayed ads (not including proposals).

DISPLAYED—RATE PER INCH:

The advertising rate is $11.50 per inch for all advertising appearing on other than a contract basis. Contract rates quoted on request.

AN ADVERTISING INCH is measured ⅞ inch vertically on one column, 3 columns—30 inches—to a page.

E.N.R.

NEW ADVERTISEMENTS received by January 18th appear in January 27th issue subject to limitations of space available

---

EXPERIENCED SUPERVISORY ENGINEERS

* * *

SOUTH AMERICA

A large integrated oil company needs experienced supervisory and staff engineers of the following categories in Venezuela.

SENIOR AND SUPERVISORY ENGINEERS.

10 to 20 years rounded experience in Civil, Electrical or Mechanical Engineering to perform staff engineering studies or to supervise design, estimating, and construction of townsites, public utilities and oil field industrial installations.

* * *

Retirement Plan, paid vacation,
Career opportunity

P-7406 Engineering News Record
330 W. 42nd St., New York 18, N. Y.

PERMANENT POSITION

with growing future with well-financed distributor new equipment line for man 25-45 with experience in sales of equipment to highway construction contractors, local governments, airport builders, etc. Need not be graduate engineer. Knowledge of northeastern states preferred. Please give complete details of experience and salary need in first letter to:

HERBERT M. PETZOLD
Fifth Avenue Owego, New York

ENGINEERS WANTED

Architectural, Civil and Other Specialties are urgently needed by the City of Detroit to prepare plans, specifications and drawings and to supervise and inspect construction on a wide variety of municipal projects. Salary ranges from $3139 to $5048 a year for a 40 hour week. For information address the

DETROIT CIVIL SERVICE COMMISSION
15th Floor, Water Board Building,
Detroit 26, Michigan

WANTED

2 Structural detailer—checkers

Permanent jobs for good men with experience in all types of bridge and building work.

Moving expenses will be paid by the Company to men who qualify.

Apply by letter giving resume of experience, also salary desired.

PAXTON & VIERLING IRON WORKS
P.O. BOX 1085 OMAHA, NEB.

BUILDING ESTIMATOR WANTED

Man with initiative and ability. Must be thoroughly versed in quantity survey, man hours, and unit costs on excavation, concrete, masonry, and carpentry both rough and finish. Your earnings will be predicated on your own ability to produce estimates that will secure profitable contracts in competitive bidding. An excellent opportunity will be given to the man selected as he will receive a drawing account against a percentage of profit. State minimum drawing account and give complete details in connection with your experience. Men who cannot answer to the above qualifications are requested not to waste their time and ours in replying to this advertisement.

WALTER W. OEFLEIN, INC.
5345 N. HOPKINS STREET
MILWAUKEE 9, WIS.

REPLIES (Box No.): Address to office nearest you
NEW YORK: 330 W. 42nd St. (18)
CHICAGO: 520 N. Michigan Ave. (11)
SAN FRANCISCO: 68 Post St. (4)

CIVIL SERVICE

CIVIL ENGINEER—to assist in planning, designing and constructing docks, piers, warehouses and other harbor facilities and railroad track layouts. Entrance salary $350 per month advancing to $400. Applicants must have a degree in engineering and two years of engineering position experience or must have ten years of professional engineering experience. Maximum age 45. Civil service position. Good retirement system. Write City Service Commission; City Hall, Milwaukee, at once for announcement describing nature of position, duties and technical requirements.

POSITIONS VACANT

WANTED—ENGINEERS, Architects, Draftsmen experienced in the design of sewers, sewage treatment plants, water treatment plants and industrial buildings. Also engineers to supervise construction. State qualifications, experience, salary requirements and date available. P-1155, Engineering News-Record.

WANTED: EXPERIENCED Structural Designers, Seelye, Stevenson & Value, 101 Park Avenue, New York, N. Y.

STRUCTURAL DESIGNER. Unusual opportunity for experienced designer familiar modern highway, bridge, and industrial building practice, to take charge of going organization. Give full details in first letter. P-7600, Engineering News-Record.

WANTED: EXPERIENCED structural and industrial designers. Seelye, Stevenson & Value, 101 Park Avenue, New York, N. Y.

(Continued on opposite page)

PAVING SUPERINTENDENT

EXPERIENCED

Excellent opportunity to become general superintendent for large construction company. Permanent position and location.

Furnish all details—Age, experience, references, salary, education.

P-7598, Engineering News-Record
330 West 42nd Street, New York 18, N. Y.

WANTED—Mechanical and Structural Engineers For designing and detailing work on concrete reinforcement, structural steel and hangar door construction. Requirements are three to four years practical experience or recent graduation from technical school. Desirable working conditions and opportunities for advancement. These openings are with a nationally known steel fabricating company, located in eastern Ohio. Applicants will please submit a record of their qualifications.

P-3731, Eng. N-R, 520 N. Mich. Ave., Chicago

SUPERINTENDENT WANTED

By Contractor in New York area. Must be experienced in both building and heavy construction work. Immediate job is one of about three years duration, located in the Great Lakes area, but the right man can count on continuous employment. Must have good record with reputable contractors in order to be considered for this opening.

P. 7461 Engineering News Record
330 W. 42nd St., New York 18, N. Y.

When Writing Your Ad

Provide an indexing or subject word.

Write it as the first word of your ad.

If it is a Position Wanted or Position Vacant ad, make the first word the kind of position sought or offered.

This will assure proper classification in the column.

The right is reserved to reject, revise or properly classify all Want Advertisements.

Proper Classification
increases the possibility of
Prompt Returns

AVAILABLE
SUPERINTENDENT or ASSISTANT SUPT.

Graduate Civil Engineer, 38 years of age, long experience in heavy construction such as, oil refineries, chemical plants, industrial buildings, airports and Military Bases, dams and flood control projects, and mass concrete. Know Government requirements. Have worked both foreign and domestic.

PW-7677. Engineering News-Record
330 West 42nd Street, New York 18, N. Y.

POSITIONS VACANT

(Continued from opposite page)

WANTED—STRUCTURAL Engineer. Capable of designing simple structures in steel and reinforced concrete. Applicant must have several years of experience. Opportunity for top position. Give full details, salary and date available. P-7606, Engineering News-Record.

SEWER FOREMAN, for work in the Borough of Queens, N.Y.C. Must have ability to carry out job, given necessary material and tools. Must be able to organize good gang and given full control. Top wages for right man. P-7674, Engineering News-Record.

FOUNDATION FOREMAN for work on 1 story houses in Borough of Queens, N.Y.C. Must have ability to organize own gang. Given full authority over men: Top wages for right man. P-7675, Engineering News-Record.

WANTED: ESTIMATOR for general Contractor operating in eastern seaboard. Must be well skilled in quantity take-off of all items except mechanical. Chance for advancement and earning interest in business for right man. Give full particulars and references. P-7692, Engineering News-Record.

POSITIONS WANTED

AUDITOR-ACCOUNTANT seeks connection with reputable construction or engineering firm. Twenty years as accountant, auditor, chief accountant, chief auditor, office manager and assistant project controller all classes construction. Experienced on large and small projects, joint ventures, cost plus fixed fee and subcontracts. References and bond, location immaterial. Reply PW-7428, Engineering News-Record.

STRUCTURAL ENGINEER, 34 desires permanent position in construction, design or plant eng. I am Ref. Prof. Eng. (Structural) Conn. Good references. PW-7424, Engineering News-Record.

PROJECT MANAGER or General Superintendent on heavy construction project in United States. Fifteen years experience on both engineering and construction of highways in west and middle west. Experienced administrator. Project manager on three million highway project past six months. Civil Engineer. Experience includes construction of docks, sea walls, and pipe lines. Available about February 1. Present salary $12,000. PW-7483 Engineering News-Record.

ENGINEER—EXECUTIVE ability, presently District Sales Engineer, experienced design, sales, field service heavy steel forms, batching plants, concrete mixers and paving machinery, desires connection with manufacturer or contractor in responsibile capacity. PW-7497, Engineering News-Record.

CONSTRUCTION SUPERINTENDENT, Project Manager, or Job Superintendent. Over 15 years experience as such, in practically all types of Industrial, Commercial, and Governmental construction work. Excellent references. Available in Jan., 1949. PW-7510, Engineering News-Record.

BUILDING CONST. Manager; 28 years experience. Thoroughly understands estimating, pricing, sub-letting, purchasing, supervision and office routine. PW-7564, Engineering News-Record.

CIVIL ENGINEER desires construction position in West Indies or South America, experienced survey, highway and railroad engineering, resident engineer on power project past 15 months, young, single and willing. PW-7570, Engineering News-Record.

SPECIFICATIONS WRITER—Graduate Engineer, seven years experience in all types heavy construction contracts. PW-7604, Engineering News-Record.

SUPERINTENDENT 18 YEARS experience in concrete, dams, foundations, sewers, tunnels and buildings. Also steel sheathing and piling. Will go anywhere. PW-7559, Engineering News-Record.

FORMER CONTRACTOR desires position, 12 years experience as prime contractor on sewer disposal, water filtration, industrial and residential construction, also 10 years as superintendent on large and small projects. Good references, available immediately. PW-7571, Engineering News-Record.

POSITIONS WANTED

HARD HITTING Construction Superintendent available now; age 41; married and 2 children; good organizer; not afraid of hard work; can handle men and obtain good results; go anywhere in United States; specializing large housing projects. PW-7601, Engineering News-Record.

MECHANICAL ENGINEER, 29, married, Prague Technical University, 5 years experience, am interested in working abroad in U. S. or Latin America or Canada. PW-7671, Engineering News-Record.

CIVIL-STRUCTURAL Engineer. 14 years domestic and foreign experience. Licensed. Design, construction, power plants, industrial buildings, locks structures, sulphite recovery system. Pacific coast preferred. PW-7670, Engineering News-Record.

STRUCTURAL ENGINEER, 33, college graduate, registered in N. Y. Thoroughly experienced in the design of all phases of steel, timber and concrete construction. Eight years industrial plant structures, four years general field and office engineering. Presently employed at good salary by major chemical corporation. Desire change for position of responsibility with opportunity for advancement or affiliation. PW-7685, Engineering News-Record.

CONSTRUCTION MANAGER thoroughly experienced in field and office management, estimating, purchasing, expediting, engineering architecture, cost accounting and construction methods desires connection with general contractor southern location preferred. PW-7690, Engineering News-Record.

PART TIME WORK WANTED

STRUCTURAL DESIGNER and detailer, material handling equipment designer, 22 years experience, desires part time work. Licensed engineer, member A.S.M.E. PTWW-7491 Engineering News-Record.

WANTED

ANYTHING within reason that is wanted in the field served by Engineering News-Record can be quickly located through bringing it to the attention of thousands of men whose interest is assured because this is the business paper they read.

FOR SALE

Contracting business, road building, land clearing, excavating, etc.
Completely equipped with good machinery, now operating.

Write P. O. Box 713 Little River Sta.
Miami, Fla.

FOR SALE

Heavy Construction Co.

Land Clearing, Road Building, Excavating
$30,000.00 in signed contracts
Inventory value only

***Addressee* 2265 S.W. 28th St.**
Miami, Fla.

FOR RENT

LORAIN MC-4 MOTO-CRANE

w/70' Boom, 5 sections prefer long term contract. Present loc. Downsville, N. Y.

J. F. CONCANNON & CO.
DOWNSVILLE, N. Y.

FOR SALE

Insley Shovel K-12

Buda Diesel Engine. Machine is one year old, and used only 3 months of that time. Std. Shovel. ½ yd. Dipper. New Condition. REASONABLE

DAVID J. BENJAMIN
Hotel Philips Philipsburg, Pa.

FOR SALE

NORTHWEST MODEL 25

Serial #5516—6 Cyl. Wisconsin Gas Engine—Wide Cats—45 Ft. Boom—Fairleads—¾ Yd. R.H. Page Drag Bucket—Excellent Condition—Will stand the most rigid inspection. Priced reasonable.

GENERAL CONSTRUCTION CO.
1221 E. Fifth Ave. Columbus 3, Ohio

FOR SALE

1—N. W. Shovel, 2½ c.y., new Oct. 1946
1—N. W. Shovel, 1½ c.y., new April 1946
1—P & H Dragline, 1½ c.y., new June 1948
1—N. W. Shovel, ¾ c.y. Diesel, Backhoe—40' Crane, Dragline, new Aug. 1948
1—Allis Chalmers Tractor Model HD19H, new May 1948
5—D W 10's—used 2500 hours
1—Caterpillar Auto Patrol #12—9K4626
1—Caterpillar D8 Angledozer #8R8933
1—Caterpillar D7 Bulldozer 4T5988

WILLIAMS CONSTRUCTION CO.

Box 145, Middle River, Baltimore 20, Md.

Phone: Essex 1310

FOR SALE OR RENT

Link Belt Truck Crane

New 1947. T 90—Sectional Boom up to 122 ft—Back Hoe with High Gantry and Extra Counter Weight—Clam Shell and 3,000 LB. Vulcan Drop Hammer with Leads. Used about six months.

FS-7325, Engineering News-Record
330 West 42nd Street, New York 18, N. Y.

WANTED

WANTED

Rotary kilns:
Size 11', 10', 9', 8', 7' and 6' dia. 100' or longer.
Compeb mills:
6' and 7' dia.
Tube mills:
5', 6' and 7' dia.
Jaw crusher:
7" x 9"
Ball mills:
7' in diameter or larger and 8' in length or longer.
Slurry filters, drum or disc type
Steel tanks 14' in dia. x 12' to 25' or longer with ¼" or ⅜" plate
Bradley Junior Pulverizer.

W. 7474 Engineering News Record
520 N. Michigan Ave., Chicago 11, Ill.

WANTED

2500 Lin. Ft. good used

7" Road Forms

Also used Highway Widening Machine.

W-7696, Engineering News-Record
520 North Michigan Ave., Chicago 11, Ill.

WANTED

2-Traxson Pipelayers

(sidebooms) complete for Caterpillar D-6 or D-7 Tractors.

A. H. CARLSON
2119 West 71st St. Chicago, Ill. Republic 7-2700

WANTED

ONE STEEL GUY DERRICK

mast 60 ft.; boom 50 ft. minimum; with bull wheel; rig for clamshell and five tons at 20°.

W. 7479 Engineering News Record
330 W. 42nd St., New York 18, N. Y.

WANTED TO BUY

KOEHRING DUMPTORS OR LARGE TRUCKS

WITH ROCK TYPE DUMP BODIES

SUSQUEHANNA CRUSHED STONE CORP.
Kingsley, Pa.
Telephone — Brooklyn, Pa. 2164

IN STOCK—FOR SALE

FOR IMMEDIATE DELIVERY

NEW PLAIN HOT ROLLED ANNEALED MILD STEEL SHEETS
Approx. 180 Tons—12 Gauge x 36" x 96"
LOCATED IN NEW YORK

NEW HOT ROLLED MILD STEEL PLATES
Approx. 330 Tons—3/16" x 5' x 15'
LOCATED IN NEW YORK

Approx. 50 Tons—3/16" x 5' x 20'
LOCATED IN BALTIMORE

We warrant all of the above to be new prime and mild steel, carbon not exceeding .12 max.

FABRIKANT
STEEL PRODUCTS, Inc.
50th Floor—Woolworth Bldg.
New York 7, N. Y. BEekman 3-3041
CABLE ADDRESS: FABKANT, New York
MEMBER: Association of Steel Distributors

FOR SALE

1½ YD. OSGOOD SHOVEL

Model 810, new Oct. 48, with Caterpillar D13000 engine used 200 hrs. Located Eastern Penna.

F.S. 7401 Engineering News Record
330 W. 42nd St., New York 18, N. Y.

PIPE

FOR SALE

C. I. FLANGE PIPE and FITTINGS

Immediate Delivery—A.W.W.A. Standard

3—30 inch 90° Bends
1—30 inch 90° Bend—Long Radius
1—20" x 20" x 20"—90° Bend—side outlet
4—20" x 20" x 20" Tee
3—16" x 16" x 16" Tee
2—20"—45° Bends
4" - 6" - 8" - 10" - 12" - 14" - 16" - 20" - 24" Pipe

TAGCO INC.
111 Front Street - Hempstead, L. I., N. Y.
Hempstead 2-5535 or 2-8857

NEW PIPE FOR SALE

10,000' 20" Electric Welded (¼")
3,000' 24" Seamless (½")

FS-7463, Engineering News-Record
330 West 42nd Street, New York 18, N. Y.

FOR SALE

IMMEDIATE DELIVERY

Cast Iron Water Pipe & Fittings

150 - lb. pressure—B&S A.W.W.A. STANDARD

NEW PIPE—4-inch 10-inch
—6-inch 12-inch
—8-inch
RECONDITIONED—12-inch
16-inch
20-inch
24-inch
VALVES—All sizes—New and Reconditioned.
FLANGED PIPE— 6-inch New
8-inch New
10-inch New
12-inch Reconditioned
14-inch Reconditioned
C.I. WATER PIPE FITTINGS—All kinds and sizes.
SOIL PIPE—from 2 inch to 15 inch and Fittings.
Immediate delivery

TAGCO, INC.
111 Front St. Hempstead, L. I., N. Y.
Hempstead 2-5535-8857

SHOVELS AND CRANES

4500 Manitowoc Dragline (4 mos.), 54-B Bucyrus Erie Hi-Lift (4 mos.), 54-B Bucyrus-Erie Hi-Front (3 yrs.), 2 Marion 111M Hi-Front (new), 4 Marion 362 (1½c.y.) new, Lima shovels Hi-Fronts and Standards both new and used, Lorain 820 Dragline (new).

SPECIALS

1—54-B Bucyrus-Erie standard shovel front (new), 22-B Bucyrus-Erie full combination (3 yrs.), Lorain Truck Crane Model 40—20 ton (18 Mos.).

HALL—RAE
614 Bessemer Bldg. Pittsburgh 22, Pa.

Lorain TL-20

Moto-Crane—Half Yard Shovel—Clamshell Crane
50 Ft. Boom

1 year old—same as new

D. C. ELPHINSTONE, INC.
115 S. Calvert Street
BALTIMORE 2, MARYLAND

SALE or RENT

3-27FD REAR DUMP EUCLID TRUCKS

15 Ton—9.7 Struck
A-1 Condition

EUCLID MEMPHIS SALES, INC.
185 E. Butler Avenue
P. O. Box 2493
Ph. 8-0491 Memphis, Tenn.

FOR SALE

1—TD9 International Tractor w/Bucyrus Bull Grader
1—T6 International Tractor w/Bucyrus Bulldozer
1—Barber-Green Ditcher 44C
1—Insley Shovel/Backhoe Combination
1—10 Yard Woolridge Scraper
1—3 wheel 7 ton roller

FERGUSON CONSTRUCTION CO.
137 Boulevard, NE
Atlanta, Georgia

FOR SALE

1—TANK 8 ft. x 17 ft.
6392 Capacity with 18 inch man hole
1—TANK 8 ft. x 23 ft.
8642 Capacity with 18 inch man hole

Both tanks will comply with underwriters specifications for under ground or above ground label.

H. T. OSBURN & CO., INC.
631-12th St. Franklin, Pa.

RAILS - ANGLE BARS TIE PLATES

Write for Regular Bulletins of
CURRENT LISTINGS
Complete Range of Sizes
Always Available
RAIL DIVISION

COMMERCIAL METALS Company
LATIMER AT CORINTH, P.O. BOX 1046, DALLAS

RAIL
STEEL PLATE
STRUCTURALS, PIPE,
TUBING, WIRE ROPE,
FERROUS AND NON-FERROUS SCRAP

BOUGHT-SOLD LIQUIDATED

DULIEN STEEL PRODUCTS, Inc.
of Washington
9265 E. Marginal Way • Seattle 8, Wash. • LAnder 6000

FOR SALE

1 Lorain Model 75 Diesel Powered Combination Shovel & Dragline

McCULLOUGH INDUSTRIES, INC.
P. O. Box 630 (9-4694) Birmingham 1, Ala.

FOR SALE

4—"Caterpillar" Diesel D8 Tractors & LeTourneau Model W Scrapers, completely equipped.
1—Caterpillar Diesel RD7—74 Inch Gauge Tractor
1—LeTourneau YR Scraper
1—LeTourneau FP Scraper

All of this equipment is in first class operating condition ready to go.

Write for complete details and prices to:
BOX #955
SIOUX FALLS, S. D.

FOR SALE

One new 4 wheel tilting type trailer, equipped with hydraulic and air systems, lights, brakes and 9.00 x 20 HD Firestone tires. Has both ball and socket and ring hitch. Ideal to move small tractors. Manufactured by C. S. & S. Co. Price $1,000.00 F.O.B. Carbondale, Illinois.

One set Pile Driving Leads, Steel, 40 ft. long. Price $450.00 F.O.B. Carbondale, Illinois.

E. T. SIMONDS CONSTRUCTION CO., INC.
Box 356 Carbondale, Illinois

FOR SALE
2600 Rounded Point

SCOOP SHOVELS

60¢ ea.—on complete lot basis

MATLOW CORPORATION
922 Burnet Avenue Syracuse, New York

FOR SALE AT A RIGHT PRICE:

1—Sterling Diesel Tandem Tractor with a new H.B. 600 Cummings Motor. Tractor completely rebuilt two months ago by Sterling Motors.
1—90 Ton Rogers "I" Beam Trailer.
1—Rogers Low-boy with 80 Ton Drop Deck. 750x18 Tires.

WANTED:

1—Model 132 Hanson Shovel Front.

Write **T. J. KILMAIN SALES CO.**
NORTH MT. VERNON AVE., UNIONTOWN, PENNA.
or call Uniontown 5400

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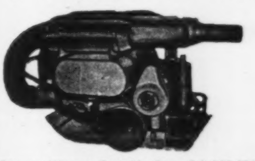
SALE IMMEDIATE DELIVERY



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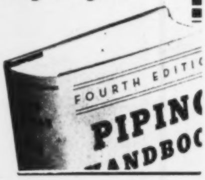

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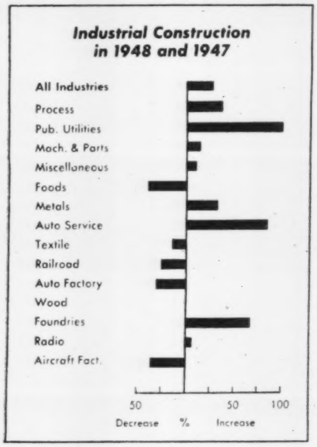


Plant expansion nears dollar value record

Dollar commitments made by industries for plant expansion in 1948 were the second highest on record. Contracts awarded for industrial building, as recorded by ENGINEERING NEWS-RECORD, totaled $1.095 billion (up 27 percent over the 1947 awards of $862 million and only 2 percent below the 1946 all-time record of $1.113 billion).

Process industries spent the most money for plant expansion, $401 million, or 37 percent more than in 1947. Expenditures, however, were still below the postwar high of $499 million in 1946.

Public utilities were second with $250 million for industrial building construction in 1948, doubling the amount spent in 1947. The 1948 volume was the highest ever recorded by ENGINEERING NEWS-RECORD.

Five of the thirteen industries classified by ENGINEERING NEWS-RECORD spent less money for plant expansion in 1948 than in 1947. Among these industries food plants showed the greatest decline, 39 percent. Aircraft factories declined 35 percent; auto factories, 30 percent; railroad shops, 25 percent; and textile plants, 14 percent.

Steel shipments to exceed all previous marks in '49

Shipments of finished steel products are expected to reach 68,000,000 tons in 1949, 3,000,000 tons or 4.6 percent more than the all-time record made last year and 7,500,000 tons more than average yearly shipments during the war.

Tonnage available for fabrication for the first quarter of 1949 is 4.3 percent greater than in the corresponding quarter of 1948. Construction will thus receive only the same share of available supplies this year as last.

Steel scrap supplies are piling up as imports rise sharply. Prices have come down $2 from quotations prevailing late last summer.

Building material prices continue to decline

ENGINEERING NEWS-RECORD's building material cost component declined 0.5 percent in December and is now 2.2 percent below the record peak reached last August. A similar trend is indicated by the new BLS weekly building materials price index—down 1.4 percent in December and 1.8 percent from last September's peak.

Construction labor supply showed improvement in '48

Contract construction employment was up 15 percent in the first 11 months of 1948 compared with the corresponding period of 1947. The 11-month average was 2,205,000, according to the Bureau of Labor Statistics, compared to 1,916,000 in the preceding year.

The number of apprentices employed was up 16 percent to a record high of 133,250 in 1948, as reported by the Bureau of Apprenticeship.

Report production figures for plywood, brick, roofing

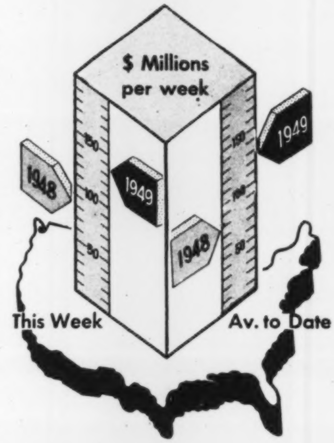
Softwood plywood production in October was estimated at 184,860 M sq. ft., an increase of two percent over September according to the Bureau of the Census. Production in the first 10 months of 1948 was 16 percent ahead of the corresponding 1947 output. Log stocks are still increasing, with October stocks of 353,443 M ft. up 15 percent over September stocks.

Unglazed brick production reached a new postwar peak in October of 599 million. This was 5 percent more than the number produced in the previous peak month of August 1948 and 17 percent greater than production in October 1947.

Asphalt roofing shipments in October totaled 5,719,000 squares, the highest for any month this year.

ENR INDEX NUMBERS

Index Base = 100		1913	1926
Construction Cost . .	Jan. '49	477.41	229.49
Building Cost	Jan. '49	354.91	191.85
Volume	Dec. '48	304	133



Activity This Week

As reported to ENR

Amount of contracts let

(Millions of dollars, continental U. S. only)

	Week of Jan. 13 1949	Cumulative 1949 (2 wks.)	1948 (3 wks.)	% Chge
Federal	$14.6	$48.8	$35.3	+107
State & Mun.	58.7	103.4	94.9	+64
Total Public	$73.3	$152.2	$130.2	+75
Total Private	59.2	104.9	93.1	+69
U. S. Total	$132.5	$257.1	$223.3	+73

Contracts by type of work

	This Week	Cumulative 1949 (2 wks.)	1948 (3 wks.)	% Chge
Waterworks.	$3.4	$6.5	$3.6	+175
Sewerage . .	6.1	11.0	5.7	+189
Bridges	6.3	17.2	14.0	+83
Highways . .	22.9	28.5	40.7	+5
Earthwork, Waterways.	9.9	41.6	11.4	+447
Buildings,				
Public	20.6	39.3	40.6	+46
Industrial .	17.4	22.0	17.9	+83
Commercial	33.8	73.7	68.2	+63
Unclassified	12.1	17.3	21.2	+23

NOTE: Minimum size projects included are: Waterworks and waterway projects, $28,000; other public works, $50,000; industrial buildings, $68,000; other buildings, $250,000.

New capital for construction

	Cumulative 1949 (2 wks.)	1948 (3 wks.)	% Chge
NON-FEDERAL . .	$47.3	$118.1	—40
Corporate Securities	18.3	71.1	—61
State and Municipal	29.0	47.0	—8
FEDERAL	. . . .	. . . .	. . . .
Total Capital	$47.3	$118.1	—40

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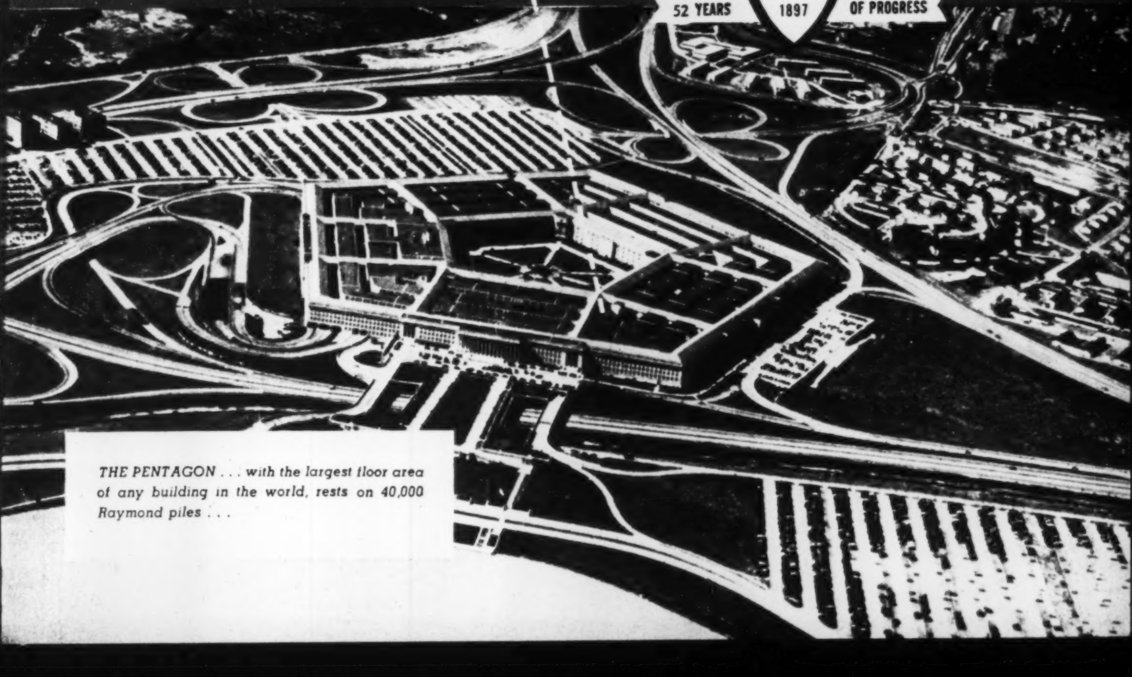

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Timken bearings in the wheels help these Goodman locomotives stay on the job with minimum time out for maintenance. They eliminate breakdowns due to bearings and save lubrication time. Dust and dirt can't hurt them because Timken tapered roller bearings permit the use of closures that keep the dirt out and the lubricant in.

Due to the line contact between rolls and races and positive roll alignment, Timken bearings have tremendous load-carrying capacity. Their true rolling motion and incredibly smooth surface finish enable Timken roller bearings to operate freely and frictionlessly. Due to their tapered design they carry any combination of radial and thrust loads.

Timken bearings are made of Timken fine alloy steel and normally last the life of the machine in which they are used.

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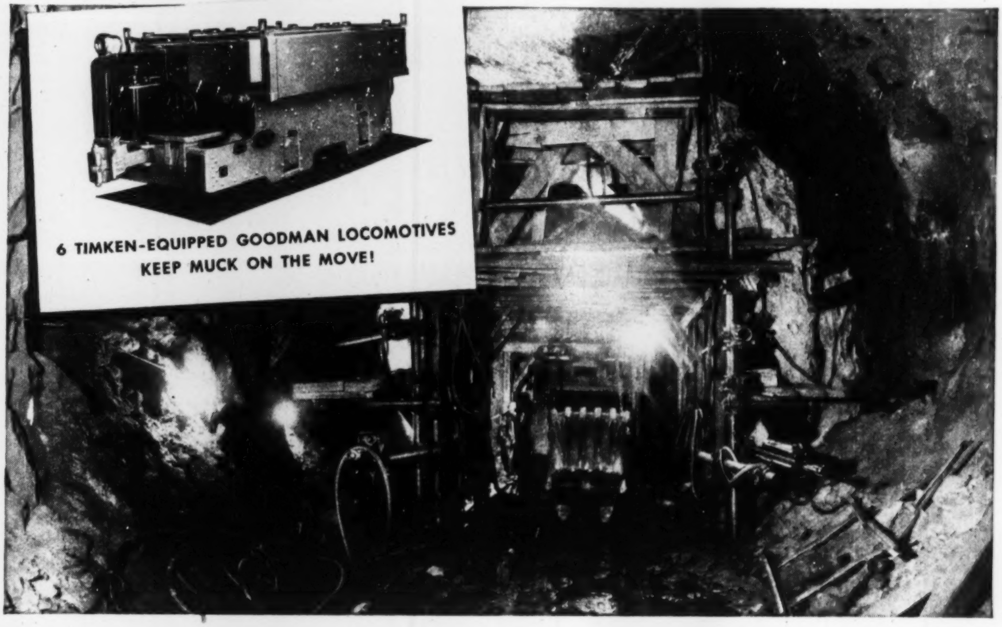

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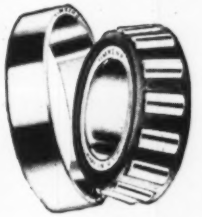

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